INTERNATIONAL JOINT COMMISSION

ARGUMENTS

ON THE REFERENCE BY THE UNITED STATES AND CANADA

IN RE

LEVELS OF THE LAKE OF THE WOODS

AND ITS TRIBUTARY WATERS AND THEIR FUTURE REGULATION AND CONTROL

BEING

FINAL ARGUMENTS

AT WASHINGTON, D. C.
APRIL 4-8, 1916

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INTERNATIONAL JOINT COMMISSION.

CANADA.	UNITED STATES.
CHARLES A. MAGRATH, Chairman.	OBADIAH GARDNER, Chairman.
HENRY A. POWELL, K. C.	JAMES A. TAWNEY.
P. B. MIGNAULT, K. C.	R. B. GLENN.
Lawrence J. Burpee, *Secretary.*	Whitehead Kluttz, *Secretary.*

FINAL ARGUMENTS BEFORE THE INTERNATIONAL JOINT COMMISSION IN RE LEVELS OF THE LAKE OF THE WOODS.

INTERNATIONAL JOINT COMMISSION,
Washington, D. C., April 4, 1916.

The International Joint Commission, pursuant to public notice, met at Washington, D. C., on Tuesday, April 4, 1916, at 10 o'clock a. m., to hear final arguments in re the levels of the Lake of the Woods.

Present: Obadiah Gardner, Charles A. Magrath, James A. Tawney, Henry A. Powell, R. B. Glenn, P. B. Mignault; Whitehead Kluttz and Lawrence J. Burpee, secretaries.

Also, Adolph F. Meyer, of St. Paul, Minn., and Arthur V. White, of Toronto, Canada, consulting engineers to the commission.

Mr. GARDNER (chairman). Gentlemen, if you will come to order, we will proceed with the hearing. It will be first necessary to get the appearances of those who represent the different interests in this problem.

(The following appearances were announced:)

Manton M. Wyvell, Washington, D. C., representing the Government of the United States.

Col. Mason M. Patrick, Corps of Engineers, United States Army.

Maj. E. D. Peek, Corps of Engineers, United States Army.

Frank H. Keefer, K. C., Thorold, Ontario, representing the Dominion of Canada and the Province of Ontario.

Edward Anderson, K. C., Winnipeg, Canada, representing the Dominion of Canada.

W. J. Stewart, Ottawa, Canada, chief hydrographer for the Dominion of Canada.

James White, Ottawa, Canada, assistant chairman, Conservation Commission of Canada.

J. B. Challies, Ottawa, Canada, superintendent of water power for the Dominion of Canada.

Clifford L. Hilton, St. Paul, Minn., assistant attorney general, State of Minnesota; and

J. A. O. Preus, St. Paul, Minn., auditor for the State of Minnesota, representing the State of Minnesota.

A. B. Hudson, attorney general of Manitoba, representing the Province of Manitoba.

Isaac Campbell, K. C., Winnipeg, Canada, representing the city of Winnipeg.

D. H. Laird, Winnipeg, Canada, representing the Winnipeg Electric Railway Co., the Winipeg River Power Co., and two suburban companies operating car lines in the suburbs, the Suburban Rapid

Transit Co., and the Winnipeg, Selkirk & Lake Winnipeg Railway Co.

C. J. Rockwood, Minneapolis, Minn., representing the Rainy River Improvement Co., the Minnesota & Ontario Power Co., the Keewatin Lumber Co., and the Keewatin Power Co.

Hon. Halvor Steenerson, of Minnesota; and

C. E. Berkman, Chisholm, Minn., representing the navigation, harbor, fishing, agricultural, and camping interests.

John E. Samuelson, Duluth, Minn., representing settlers on the Rainy Lake and its tributaries.

A. W. Clapp, St. Paul, Minn., representing the Shevlin-Clarke Lumber Co.

Allan McLennan, Kenora, Canada, representing the town of Kenora, and the navigation interests at that point.

A. G. Murray, Fort Frances, Ontario, representing the city of Fort Frances.

C. P. Wilson, Winnipeg, Canada, representing the Lake of the Woods Milling Co.

Mr. GARDNER. The commission has arranged that the power interests are to be heard first. Following them we will hear the navigation and harbor interests, then the fishing interests, and last the agricultural and camping interests.

I will say also that the commission has suggested that at the conclusion of the arguments of the representatives of the foregoing interests the representatives of the Governments will have the opportunity of discussing any specific phase of the reference which they may deem necessary in order to aid the commission in reaching an agreement as to its conclusions and recommendations.

Mr. BURPEE. Mr. Chairman, I have here a letter which has been received from Mr. E. L. Taylor, K. C., of Winnipeg, representing the summer campers. The letter reads as follows:

WINNIPEG, MANITOBA, CANADA, *March 11, 1916.*

LAWRENCE J. BURPEE, Esq.,
Secretary International Joint Commission, Ottawa, Ontario.

DEAR SIR: I beg to acknowledge receipt of your letter of the 10th ultimo advising me that the arguments in the Lake of the Woods matter will be heard at the regular semiannual meeting of the commission in Washington on April 4 next.

I have brought this matter before the property holders in the Lake of the Woods, whom I represented at the sittings held in the city of Winnipeg. They have decided that it is scarcely necessary for them to send any counsel to appear at the meeting to be held in Washington on said date. They have nothing further to add to the evidence or arguments put before the commission at the sittings here.

I am instructed, however, to say that they do not desire your board to consider that by not appearing at the meeting in Washington they have in any way abandoned the position which they took at the meeting held in Winnipeg recently. We desire to reaffirm the said position and allow our case to stand upon the evidence and arguments produced at that time. As was stated then, we are not making a case for damages. Our position is that all possible consideration should be given to the interests which I represent, so as to minimize as far as possible the damages which would accrue if the waters of the lake were maintained at a very high maximum.

If, however, damages should result from the fixing of a high level, then we desire that the most careful investigation should be made of the individual cases, so that justice may be done to each and all of the injured parties.

Faithfully, yours,

E. L. TAYLOR.

Mr. GARDNER. Mr. Rockwood, are you ready to proceed now with your argument?

Mr. ROCKWOOD. Mr. Chairman, I had no idea that I was to make the opening argument.

Mr. GARDNER. I am following the schedule that I find on my desk here, from which it appears that the power interests are to be heard first.

Mr. TAWNEY. Mr. Chairman, I desire to say that this arrangement was made in the absence of the chairman yesterday, and the reason for the arrangement is that the power interests involved in this investigation are the paramount interests so far as dollars and cents are concerned, and, following the analogy of condemnation proceedings, the party seeking to invoke the exercise of the power of eminent domain is usually the one that proceeds first and sets forth the reasons for the exercise of that power. While this is not by any means a condemnation proceeding, it is analogous. For that reason the commission concluded that inasmuch as the power interests were the paramount interests and would be the chief beneficiaries in the utilization of the waters of the lake and waters flowing into and from the lake, the burden should be on them to present their case, and then the other interests, after hearing the arguments of the power interests, could follow.

ARGUMENT OF MR. C. J. ROCKWOOD.

Mr. ROCKWOOD. Mr. Chairman, while I have prepared a brief, I have not prepared an exhaustive one by any means. One reason is that I have not had sufficient time in which to do it. The final hearings were two months ago, and we got the printed evidence only about a month ago. That evidence contains four or five hundred pages, including a mass of data, figures, engineering in character, that are contained in the reports and testimony that have been put in our hands, beginning with the 1st of November, when we received the text of the engineers' report. The mass of data is so great that I have been entirely unable in the time that I have had to reduce it in such manner as to make it more available than it is in its present form.

There are a few conclusions which stand out so conspicuously that they seem to me to be substantially conclusive of the general conclusions to which this commission must come. I have referred briefly to those. I have taken the liberty to use some figures and make two or three references to one publication that has not been put in evidence. That is a report of the Water Power Department of the Canadian Government. As I remember it, it is known as Water Resources Paper No. 3. It is referred to two or three times in this printed brief. I have also made very brief references to the data and conclusions of your own engineers; and you will not find, so far as the engineering facts are concerned, very much in this brief with which you are not already perfectly familiar.

I have undertaken to set out the rules of law which I think will control any future proceedings on this side of the boundary; that is, within the United States. The doctrines of law are established in the two countries in somewhat different ways. We have a written

Constitution, and that written Constitution controls not only the legislatures and the courts, but, as I understand it, it controls the treaty-making power. So that it is necessary, as I take it, to bear in mind the express provisions of the Constitution of the United States and the interpretations of the Constitution as they have been revealed in the decisions of the courts, especially of the court of last resort, the Supreme Court of the United States.

These matters of law are in the main perfectly familiar and there is nothing here that is novel. I have simply stated very briefly the fundamental principles. I have made two or three short quotations from the Constitution and referred to a few of the very numerous decisions. The few are in line with the many which might have been added. There is only one phase of this brief that, in a legal sense, I can consider in any way as raising a novel point. I will refer to that later.

Stated briefly, the development of the storage capacity of the Lake of the Woods and its principal tributary, Rainy River, and of its head waters, the basins through which it flows, will add, as I understand, something more than 100,000 continuous horespower to the possible power development on Winnipeg River. Those figures are deduced in part from the data that have been put before the commission by your own engineers. They are deduced in part from this paper that I have referred to, Water Resources Paper No. 3. I will call attention, first, to a very large item which appears in that paper.

If you will refer to page 5 of my brief, you will find the different powers between Rainy Lake and Lake Winnipeg summarized. Koochiching Falls has already developed 30 feet; Long Sault Rapids has 12 feet; Norman Dam, 19 feet; White Dog Falls, Ontario, 45 feet. Those are outside of the Province of Manitoba and are not owned by the Dominion Government. The remaining powers do, as I understand, belong to the Dominion Government or its grantees and are in the Province of Manitoba. There is at Point du Bois Falls 45 feet and undeveloped powers in Manitoba of 221 feet. This makes a total of 372 feet susceptible of development for power purposes between Rainy Lake and Lake Winnipeg. These figures differ by about 20 or 30 feet from the figures that have been used in former hearings. I have taken them from Water Resources Paper No. 3, which paper will show that they are evidently the result of very careful surveys. I can not decide which are the more accurate, the figures given in this paper or the figures of your own engineers. Your engineers will doubtless be able to inform you as to that. As I understand it, they have not made surveys on the Winnipeg River itself, but have taken their figures from other sources. The difference is not so great that it is very important, because it is only in the neighborhood of from 7 to 10 per cent of the entire fall between the Lake of the Woods and Lake Winnipeg.

Mr. Anderson. Mr. Rockwood, I do not think that the water-power officials agree with the deduction you have made from their figures. I think they maintain that the figures given by the consulting engineers to the commission are the correct ones and that you have made some erroneous calculation.

Mr. Rockwood. Very well, if I am incorrect I am glad to be corrected.

Mr. ANDERSON. I agree with you that the difference is so small that it is immaterial.

Mr. ROCKWOOD. I was not conscious of making any computations here. I was only conscious of transferring figures. I may have made a mistake in doing so.

Mr. MIGNAULT. Is there any doubt as to the correctness of these figures? If there is, I would like to know it.

Mr. GARDNER. Which calls for the greater fall?

Mr. ROCKWOOD. These figures that I have used increase the fall by about 20 or 30 feet; but there is this explanation: The figures that were used, 291 feet on the Winnipeg River, did not, as I understand, purport to include the fall at the mouth of the Lake of the Woods.

Mr. CAMPBELL. I think so.

Mr. ROCKWOOD. Well, I had understood it otherwise. That can be verified, however. The engineers will be able to give the commission the exact figures.

Mr. MIGNAULT. I understand, Mr. Rockwood, that the data collected by the engineers have been practically accepted by all interests; so I presume they are accepted by you as well as by the others.

Mr. ROCKWOOD. Certainly, Mr. Commissioner, with this qualification: The engineers did not make the survey of the Winnipeg River. If, when they get the information without any misunderstanding from the Dominion Government, which has made that survey, they say it is 291 feet instead of the figures I used, I accept it. I, of course, have no knowledge of my own, but I have made the references to this report of that survey, and it is very easy to verify my references.

Mr. MIGNAULT. I thought that on a point of figures we could have it determined immediately whether these figures were admitted, or whether there was any qualification to be made by any of the interests that are represented here.

Mr. ANDERSON. I will arrange to get the water-power officials to confer with Mr. Rockwood and we will settle that point conclusively.

Mr. MIGNAULT. That would be satisfactory.

Mr. ROCKWOOD. Of that 291 feet fall there is a considerable portion, as is shown by Water Resources Paper No. 3, that is not capable of development unless the flow of the river is fully regulated as far as it is feasible to regulate it. That statement is made with reference to two of the water powers—Upper Seven Sisters and Lower Seven Sisters. I have referred to that on page 7 of my brief. It is distinctly stated, in connection with each of those water powers, that full regulation is required to make development feasible. On those two water powers, if they are fully developed, this survey shows a total of 67,500 horsepower which is not available at all without full regulation.

Mr. POWELL. Are you taking into consideration the potential power below Lake Winnipeg—between that and the sea level beyond?

Mr. ROCKWOOD. I have referred to it, but I have not found any definite data. I have put in a short paragraph, but it is not included in any of these figures that I am using.

Mr. POWELL. We have plenty of evidence as to the value of these powers. You have given us the measurement of power, but what about the value? What do you consider the horsepower worth in its undeveloped condition?

Mr. ROCKWOOD. Mr. Commissioner, I can only answer that in this way: Raw resources, when they exist in the early stages of the development of a country and when private capital can not find immediate use for them and immediate returns, have a very small value in the sense in which that term is commonly used—that is, an immediate market value to go out and sell for cash. They have at the same time an incalculable value to a people as a whole for purposes of development. To illustrate: The United States bought Alaska for seven and a half million dollars, as I remember it, a little less than 50 years ago. I suppose that a private capitalist would not have dreamed of investing that amount of money in Alaska at that time. At any rate, in this short period of time—a little more than one generation—everybody knows that Alaska, and the adjoining part of Canada as well—the Yukon country—has come to have an actual value which is beyond computation. It would be venturesome to undertake to estimate what that value is.

Mr. POWELL. Our northwest is a more striking illustration than that. We gave 300,000 pounds sterling for it and the wheat crop each year amounts to hundreds of millions.

Mr. ROCKWOOD. Yes; I was going to mention that. My acquaintance with the Canadian northwest extends over a period of about 20 years, and I remember very well when we heard of lands out there at $1 or $2 an acre, the only price that was known for such lands, and there were thousands of acres lying open to free-homestead entry. The lands had no market value. They could not be sold.

To undertake to compute the value of this water power now, speaking from a national standpoint, would be like computing the value of the prairie country of the Canadian northwest or the value of Alaska. It can not be done. The indirect value at any stage is vastly greater than the direct value.

Mr. MIGNAULT. Well, say the potential—the future value.

Mr. ROCKWOOD. What I have in mind, Mr. Commissioner, is something a little different from that—the present value. I will undertake to define what I have in mind as indirect value. I do not know whether you have the subdivision of a county in your Provinces or not.

Mr. MIGNAULT. Yes; we have counties. A county is the unit of representation in Parliament.

Mr. ROCKWOOD. Then, take a county and ascertain the market value of every item of property, real and personal, therein. That is a comparatively easy thing to do. But that does not express nor approach the value of that county to the nation, the value of the population that it supports, the value that comes through the labor that there finds employment. The market value of a piece of property has no relation to its national value, to its value to the country. The value to the country is infinitely greater and, in some senses, is wholly incomparable. It is a value of a different kind that is not measured in dollars and cents.

Here is the one series of great water powers the development of which is in sight. The development of those powers means not merely furnishing light and electricity for cooking and running the present equipment of machinery that is in the city of Winnipeg or in the country that is tributary thereto. It is the whole region for one or two hundred miles around that is tributary to such power,

including a large section of Minnesota and North Dakota, which is easily within reach. The value of that water power from a national standpoint lies not in the market value that the power itself has either now or will ever have, but it lies in the fact that power will draw industries, large and small. The flour mills and the other industries that exist in that region now, as I understand it, are operated by this power. They are only the beginning of what will come. The chief value is in the human beings that will be attracted there and find profitable employment. The value lies in the facilities that will be furnished there for cheap manufacturing for this great prairie country that lies beyond. The market value as between an owner and a possible purchaser who must raise the money and turn it over in cash ought not to be considered for a moment; it is so small in comparison. It ought not to stand in the way for a moment: it is so small in comparison. It is almost insignificant. That is illustrated in any great industrial center that depends on water power. Minneapolis is a conspicuous instance. In the city of Minneapolis they have water power producing from 15,000 to 40,000 horsepower, possibly 50,000 in the high stages. The variation in Minneapolis is very great. There is little artificial regulation, and the stream goes from high to low as this stream never will. Consequently, there is that great range in stating the figures.

Mr. MIGNAULT. I presume, Mr. Rockwood, that all goes without saying. I think nobody will seriously contest the importance of all these water powers. So far as its being an asset to the country is concerned, I think there can be no question but that they are extremely important. You might possibly leave that point and go on to the next one. I see no difficulty, and I do not imagine anyone can contest what you are saying with reference to the importance.

Mr. TAWNEY. As I understand it, Mr. Rockwood, you are using that argument particularly with reference to question 1 of the reference: that this is one of the most advantageous uses of the waters.

Mr. MIGNAULT. So far as the importance of these power developments is concerned, I think it is unquestioned.

Mr. MAGRATH. Had you anything further to say about the city of Minneapolis, Mr. Rockwood?

Mr. ROCKWOOD. Only in the way of illustration as to the great industrial population that has gathered about a comparatively small water power. Minneapolis is a city now of 375,000 people, and it is growing rapidly. There would have been no city there of any size had it not been for the water power. No city of any size would have grown from commerce alone. Industry, the convenient opportunity for the profitable employment of labor, is what gives the great and almost incomparable value to such resources.

Mr. TAWNEY. What has been the effect of the development at International Falls in that respect?

Mr. ROCKWOOD. The development at International Falls has created a city on this side of several thousand people. I do not know exactly how many there are. At Fort Frances the growth has been from 700 or 800 shortly before that development began to several thousand. I have not the exact figures, but the development of that power has created two prosperous communities immediately at the site of the development. It has also furnished a market at profitable

prices for an enormous quantity of material—pulp wood in particular—which would have had little or no shipping value because of the distance from other possible points of manufacture; and, more than anything else that has yet actually developed, there is a certainty that at that point there will be an absolutely permanent paper industry that will be based not upon spruce pulp wood but upon poplar and other similar woods that grow like weeds in that country. They grow on every farm where they are not kept down by tillage or live stock. The spruce may disappear; the poplar never will disappear. There is a large and permanent industry that will support thousands and tens of thousands of people on both sides of the boundary adjacent to that water power.

Coming again, just for a moment, to the question of value, I can only say this: The engineers assumed, possibly for safety, that this power is worth $10 per horsepower per annum. I do not believe that it could be sold at this moment in the market at that price. I do not believe that private capitalists would want to put their money into it, because they would have to wait a good while before they could develop it and get it all out again.

Mr. POWELL. It strikes me that the best measure would be the cost of the production of horsepower by steam.

Mr. ROCKWOOD. I have printed on page 3 of my brief a table from water resources paper No. 3, which table shows the price that the engineers estimated to be the cost of power in Winnipeg produced by steam or oil or producer gas, all of which are products of coal, and the cost of hydroelectric power. The comparisons there show that the value of the water power is anywhere from $15 to $50 per horsepower per annum. But I do not want it understood that I think that this horsepower could be immediately sold on a basis of that comparison. I do not think it could be. The fact is power would not be developed by steam on the same scale that it would be developed by electricity and water power. Nobody could afford to develop the power by steam on such a scale as has already occurred and is immediately to occur in the field of water power. As I have already suggested, no capitalist could put in his money on the basis of the full value of steam power or the full value of power produced by Diesel oil or producer gas. If the capitalist could buy his water power and wait for his return, that is no measure of the value to the community. The value to the community, as I have tried to point out, is infinitely greater.

I have used some further comparisons from the figures that have been published of the effect of regulation, but there is one feature that I want to call attention to which I have not heard discussed. I have simply referred to it in a very brief way on page 8 of my brief. That feature is this: Possibly the greater part of what regulation can be accomplished has been accomplished actually during the past 25 or 30 years. So far as I remember now, the figures of the engineers give little or no information as to what the power would be to-day in the absolutely natural condition of the outlets of the Lake of the Woods. If the figures are there, I have overlooked them.

Others are going into the question of the legal status of the regulation that has occurred. I am not going into that except to say this, that the question is debatable. Otherwise, there would be no debate; there would be no discussion. So far as it is a debatable and open

question, steps that make secure further regulation will make secure existing regulation and give it a strict legal status.

Mr. TAWNEY. Mr. Rockwood, what are the chief factors that you consider in the regulation which has heretofore been established?

Mr. ROCKWOOD. The two dams, one at Koochiching Falls and one at the mouth of the outlet of the Lake of the Woods. The dam at Koochiching Falls has its legal status; the other is debatable.

Mr. TAWNEY. For the record, I wanted to know just what you considered the factors in the present regulation.

Mr. ROCKWOOD. Those two dams. It is stated in the record that there has been a series of controlling works at the outlet of the Lake of the Woods, and it is particularly to those that I refer; not only that there has been a series of works, but since 1898, at any rate, they have been actually operated.

Mr. TAWNEY. They are under governmental control?

Mr. ROCKWOOD. Yes; they have been under governmental control and have been from month to month or from year to year actually changed and manipulated; stop logs put in and stop logs taken out, and in that way regulation effected.

Mr. Chairman, on page 10 of my brief I have referred to what one of the commissioners—Commissioner Powell, I believe—called attention to, namely, Nelson River. Lake Winnipeg at high water is 719 feet above the level of the sea. At low water it is about 4 feet lower. I do not know the length of the Nelson River, but it is, at most, 200 or 300 miles. I have not seen any report of any survey.

It appears that the waters of the Rainy River and the Winnipeg River will flow from Rainy Lake to Lake Winnipeg, a distance of, say, 300 miles, with a fall of 20 to 40 feet for purposes of flow, and that all the rest may be utilized for power purposes, leaving only 40 feet at the most for purposes of flow. You know that Rainy River itself, leaving out the rapids at the Long Sault, makes its flow from the foot of Koochiching Falls, a distance of, say, 80 miles, with a fall of about 5 feet. That is all that is required, for purposes of gravity, to keep the water moving.

Winnipeg River does not require, for purposes of flow, a fall of more than 50 feet at the outside. I think I can see, as well as if I had the report of an engineer or if I had been there myself and traversed the length of that river, that it consists of a series of waterfalls that are capable of development for power purposes. From what little I know about the flow of water, it seems to me that that is a certainty. If it is, this regulation that is to take place on the Lake of the Woods, on Rainy Lake, on Lake Namakan, on all the series of basins away up in St. Louis County, and within a short distance of Lake Superior itself, the regulation that will result from using that series of reservoirs is going to have its effect on the nearly 700 feet of fall in Nelson River, as well as on the other streams. That is a suggestion. We have not the data, but it seems to me there is a degree of certainty about it, notwithstanding.

With reference to acquiring this power or the lands that are necessary to the full development, there are a number of legal questions, and the principal part of this brief is devoted to those legal questions and the citation of authorities.

Mr. MCCALL. Mr. Rockwood, at a convenient point in your argument I would like you to give me the text of the statutes, or

whatever they may be, which apply to the erection of the International Falls dam, especially as to the height of the water. If there is any provision in the statute I would like to have you state it.

Mr. ROCKWOOD. I gave the secretaries a memorandum of the acts.

Mr. MIGNAULT. There is a list here, but I would like to have the text before me. I understand there are quite a number of American statutes, and if at your convenience you can give them to me I would appreciate it.

Mr. ROCKWOOD. I will do so. On the Canadian side of the boundary private property may be taken by process of law for any purpose whatever, so far as I know.

Mr. MIGNAULT. For public purposes generally?

Mr. ROCKWOOD. Yes. The practice is to limit the taking to public purposes, but so far as the fundamental law is concerned, if there is the same strict legal distinction between public and private purposes on your side that there is on ours, I am not familiar with it.

Mr. MIGNAULT. We recognize in the sovereign the right of eminent domain, and that has been extended to public corporations, such as railway companies and other companies that have obtained the right of what we call expropriation. I do not imagine that there is any difference between our law and yours.

Mr. STEENERSON. Mr. Chairman, is it understood that in Canada the question of whether or not property should be taken for any purpose selected by the legislature is a question for the legislature to determine for itself and is not reviewed in the courts like it is in the United States?

Mr. MIGNAULT. The power to expropriate, Mr. Steenerson, is granted by Parliament or by the legislature. That power, of course, must be exercised according to conditions. But I was saying to Mr. Rockwood that we recognize what has been termed the power of eminent domain which is vested in the sovereign and which gives him the right, for public purposes, to appropriate the property of private individuals.

Mr. STEENERSON. In the United States a person whose property is sought to be taken for a public use can go into court and have it determined whether the legislature had the power to authorize the taking. There is that difference between our jurisprudence and the jurisprudence on the other side of the line.

Mr. POWELL. The whole question will be solved very simply, so far as Canada is concerned. In Canada and Great Britain the legislative bodies are simply omnipotent. In the United States your power is divided into three classes: First, the Federal power, second, the State power, and third, the residuum of power which is never taken from the people. We have no residuum of power in the people at all. What Parliament does in any matter whatever can not be questioned.

Mr. MIGNAULT. There may be a question as to whether the local legislature or Parliament had the power to pass the legislation, but that is the only question.

Mr. POWELL. That is only as against the Federal power.

Mr. STEENERSON. I understood that that was the distinction between our constitutional jurisprudence based upon written constitutions and your jurisprudence based upon general established principles.

Mr. Powell. For instance, you can not affect a vested right of contract. Our Parliament can do anything.

Mr. Rockwood. On this side, Mr. Chairman, we have in the Federal Constitution two provisions, one that private property shall not be taken for public use except with compensation. That has been construed by the courts to mean that private property shall not be taken for private purposes against the will of the owner. That has resulted in a long discussion of what is public use and what is not public use. If the legislature undertakes to authorize the taking by the Government itself for private use against the will of the owner, the courts intervene and say the legislature had not the power. It is, consequently, necessary to determine what are public uses and what are private uses.

Mr. Powell. How does this bear on the point before us, Mr. Rockwood?

Mr. Rockwood. It bears upon it in this way: It has been suggested—I do not know how far it will be argued, and that was one reason why I hoped I should hear others first—that even the Government of the United States has no power to authorize the compulsory taking of 1 inch of Mr. Landby's farm for the development of water power, and particularly for the development of water power in Canada. If I have not stated the position that may be taken, I would like to be corrected.

Mr. Steenerson. Counsel is correct, if this were a question entirely within the State of Minnesota, but, of course, it has very little application to this case, because here the real potential and actual taking is in a foreign jurisdiction and affects it by the raising of the water. I do not expect that counsel on our side will contend that this is to be governed entirely by the laws applicable to a proceeding intrastate, or entirely within the jurisdiction of the United States. So I do not think counsel's argument on that question will be of very much use.

Mr. Powell. As I understand the point, it is this: You fear that we may make some recommendation which the Federal power in the United States has no authority to carry out, but the authority rests entirely in the State?

Mr. Steenerson. No; that is not my position. My position will be that the law that counsel has pointed out here as being the law governing cases within the State of Minnesota is not applicable to a case like this, where the obstruction to the water is in a foreign jurisdiction and destroys or takes property by taking it up in the United States; that the two Governments have the power to make an arrangement whereby this property should be appraised, if it is necessary to take it for the common interest. We are not here to claim that this tribunal has no power, or that it could not carry out the objects of this reference. We contend, however, that inasmuch as the law of compensation, as it is called in Canada and England, is based upon a different theory as to the power of eminent domain, it being based upon the theory that has already been pointed out by the commissioner that the legislative power is omnipotent in determining what shall be taken and determining whether it is to be a public use or not a public use, that it can not be reviewed by the courts. That being the case in Canada, the law of compensation has been worked out more liberally to the man whose property is taken,

for the reason that a man whose property is taken against his will for a private purpose, for the aggrandizement of a private fortune at least in part, should be treated with a more liberal hand than he whose property is taken to subserve a public interest like that of navigation or the building of a necessary railroad or municipal courthouse or schoolhouse. For that reason, when this commission recommends the exercise of the power of eminent domain by reason of the act which, in the main part at least, is in the jurisdiction of Canada, and that power being properly exercised, that legislative power being so all-embracing that they could take it for the purpose of creating water power for commercial uses, which is simply a money-making proposition; if they should decide to take private property to subserve that particular interest—I do not want to be construed as meaning that they would—but supposing that they did recommend that, then it should follow that in exercising that all-embracing legislative power possessed by the Parliament over there the same liberality must follow in the compensation of those whose property is taken not for public use but for a private object.

Mr. Powell. It strikes me that we could cut off a lot of discussion. We are not going to consider, and it is not our function to consider, the power of the Federal Government or the power of the State government. We are simply reporting on the value of lands that will be flooded at a level that we recommend. Constitutionally that may fall within the Federal power by virtue of the Federal power, and they might by treaty between Great Britain and the United States, properly approved by your Congress and Senate, overrule your Constitution to a certain extent.

Mr. Steenerson. They can not do that. That is settled. There is no dispute about that.

Mr. Powell. I am not going to consider whether they can or can not.

Mr. Steenerson. If it is not made in pursuance of the Constitution of the United States it is void.

Mr. Powell. The two Governments have united in submitting to us certain questions for us to report upon. If they have done something that is entirely futile, that is their business and not ours. If they have made a mess of it, all right; it is not our funeral. We will do our duty. I can not see how this question of the constitutional power can affect us in the slightest degree, but the point you raised as to a more liberal awarding of damages or a more liberal valuation on account of the private rights of one man being taken to enhance the property of another man is legitimate argument. Outside of that I do not see what we have to do with it.

Mr. Steenerson. If the commission will permit, I will say this: I did not originate this present discussion. I was asked by counsel and a member of the commission to give the views we had, and I may add that I do not understand that this commission is to pass upon the specific value of property taken. They are simply in a general way to pass upon the total values to be destroyed compared with the total value to be created. The details and the rules which govern would, of course, be for application in the future, but it is important that the commission should bear these things in mind if they are going to make a wise recommendation to the two Govern-

ments, because in the end it depends upon the comparative importance of the values.

Mr. TAWNEY. Mr. Steenerson, your discussion of this question is relevant more especially to the recommendation which the commission must make in respect to the value of and compensation for damages that may be incurred in consequence of the raising of the level of the lake.

Mr. STEENERSON. That is the only question there is.

Mr. TAWNEY. I want to suggest that the final duty of the commission is to report to the two Governments, for the purpose of effecting a final adjudication of this dispute, its conclusions and recommendations on the facts which have been presented.

Mr. STEENERSON. I thought that was what I was talking about.

Mr. TAWNEY. I would like also to suggest here to all counsel that in so far as they can aid the commission in reaching what they think would be correct conclusions and wise recommendations we would be very glad to hear them on any phase of the subject.

Mr. STEENERSON. You are not to be misunderstood by counsel as stating now the entire position of our side. I want to say that we certainly do not concur in the idea that has been expressed by the gentleman about the advisability of creating values for water power that has no marketable value and for the sake of an imaginary water power up in the desert around Hudson Bay to destroy a prosperous community now in existence. I think that was the most insane proposition I have ever heard advanced.

Mr. POWELL. That is a pertinent contention.

Mr. TAWNEY. It is one for you to answer, as you say in the House, in your own time.

Mr. MIGNAULT. We shall have the pleasure of listening to you, Mr. Steenerson, and we will not take Mr. Rockwood's statement as to what your argument is as being conclusive until we have heard you yourself.

Mr. ROCKWOOD. I will take very little time with the rest of this statement, except to suggest my line of reasoning in response to what Commissioner Powell suggested, if I understood him correctly, namely, that it is not for this commission to consider what the powers of the Governments may be.

We have a rule which the courts enforce, that eminent domain proceedings can not be considered at all until it appears that they are likely to accomplish something. In other words, the courts will not permit a merely futile attack upon private-property interests. If it appeared that, by reason of positive provisions of the Constitution of the United States or for any other reasons, it were impossible to go beyond natural high-water mark, that would be one thing; and it seems to me it would then be futile to consider anything more.

We have all been considering something more, and been considering the possibility of taking upland and paying for it. There is not any use in considering taking upland if it is established that it can not be taken.

Mr. POWELL. There is no use in discussing that. We are not going to establish whether it is constitutional or unconstitutional, for that is a matter for the American Government and the British Government.

I should think, also, that a good deal of time might be saved by not wearying us with a long discussion of law and the principles of

assessing damages. I think the rest of the commission feel as I do, that if you take a man's land you have got to pay him for it and pay for it handsomely. That is what it all means.

Mr. TAWNEY. I can not quite agree with Mr. Powell on its immateriality. I think it is material, in so far as we are called upon to recommend to the two Governments how this compensation shall be made. Then the two Governments must exercise their power, if they adopt our recommendations, and our recommendations should be within the power of the two Governments to carry out. Otherwise we would not want the Government to say that it can not do what you recommend, because we have not the power to do it. I think this discussion is pertinent to the recommendation as to how the compensation is to be made for the value of the land which is overflowed, and the compensation paid according to the value which we have estimated. I do not say that we have any power to specifically estimate a tract of land here and there; but we are to determine the extent to which land is submerged at the level we recommend, and what is the value of the land. That necessarily implies that we must make some recommendation as to how that valuation is to be compensated.

Mr. ROCKWOOD. I will just state what I understand to be the rule of damages on this side of the boundary and the reason for it.

The rule that is applied, if not universally, almost universally, is that expressly laid down by the Supreme Court in a very recent decision that I have cited. The rule is that market value—fair value—shall be paid; and there is this reason for not paying more. I am not going to argue the adoption of any particular rule in this case, but there is this reason for not allowing more: Property is not taken to enhance private fortunes; it is taken for public use. And when property is taken by the power of eminent domain it is accompanied always by the power of regulation of prices—keeping prices down where only a fair return is made upon the investment—upon the value of the property. It works sometimes one way and sometimes another, in particular instances. The public pays always for what is taken by, we will say, a great private corporation—a railway company. The public does not put up the cash at the outset, but pays its fair return on the capital invested.

So that under our theory of law the rule of measure of damages is the same in one case as in the other, and with the same reason.

Mr. POWELL. Do you not recognize the rule of the States that proper damages are the value that the land has to the man from whom the land is taken? You must interpret that in a broad sense. Is not that the rule?

Mr. ROCKWOOD. It is the value to the man from whom it is taken; not the value to the one taking it. And, again, with this qualification, or explanation—it is not exactly a qualification—that the value to the one from whom the property is taken is measured by what he can get out of it; not by what he thinks it is worth to him.

Mr. POWELL. Not what he thinks, but what he may believe the land to be worth in comparison with another piece of land. Of course, the rule would cover a case of that kind.

Mr. ROCKWOOD. The rule is illustrated in many ways, but I will not stop to give illustrations. It is the highest market value—not neces-

sarily the value for which the property is being used at the moment. For instance, the condemnation of a spring which will furnish a supply of pure water: the value of that supply of pure water is to be paid for, notwithstanding the fact that it is running to waste at the moment. It is a matter of its fair market value, the purpose for which the property has a market value.

It is also established that for public purposes the public right is paramount to "high-water mark," using that term in the legal sense. One Minnesota case has been cited a number of times—the Minnetonka case—and on page 21 I have cited the latest discussion of our own supreme court as to what high-water mark is. While it does not in terms overrule the Minnetonka case, it gives a broader definition in favor of the public.

Mr. POWELL. What is the pertinency of that?

Mr. ROCKWOOD. Damages begin at high-water mark, but not below.

Mr. POWELL. That is, if our recommendation is below the high-water mark or lower high-water mark, there are no damages to be given to any person. That is your contention?

Mr. ROCKWOOD. Yes.

Mr. STEENERSON. We do not want to be understood as consenting to that idea when it is taken for this purpose.

Mr. POWELL. I am simply asking his view of it.

Mr. ROCKWOOD. That rule is perfectly familiar. Yesterday a number of the counsel who are now in this room listened to a decision announced by Mr. Justice Van Devanter, in the Supreme Court of the United States, announcing again that rule that the public right to high-water mark is paramount for public purposes—not for private purposes, but for public purposes.

Mr. SAMUELSON. That is subject to State control, wherever the land is lying within one of the States. The Federal Government can not lay down the rule of compensation to be exercised in the State courts. That is true, too, is it not?

Mr. ROCKWOOD. I think not. Nothing in any State statute or in any State constitution can restrain the power of the Federal Government within its field. Outside of its field the Federal Government has no power, but within its field its power is unrestrained by State law.

I have cited a number of cases where that rule is laid down, and I think there is no dispute about it in the law.

Mr. MIGNAULT. There is no overlapping of jurisdiction?

Mr. ROCKWOOD. There is no overlapping when the Federal Government sees fit to act. There is a field within which if the Federal Government does not act the State government may.

Mr. MIGNAULT. I see.

Mr. ROCKWOOD. But whenever the Federal Government acts within its field it is supreme. That has been expressly declared from the time of Marshall; and in one of his decisions he put it in this form:

> That which is not supreme must yield to that which is supreme.

The language of the Federal Constitution is that the Constitution and the laws and treaties made under the Constitution are the supreme law of the land. That applies to treaties as well as to stat-

utes. That rule has been applied and enforced over and over, again and again.

To go a little bit further on the point suggested by Mr. Samuelson, it is true that the Federal Government may be, within a State, the owner of private property, the proprietor of private property; but as a proprietor it is not a sovereign.

Mr. POWELL. That does not carry with it legislative power; it is merely proprietary?

Mr. ROCKWOOD. Merely proprietary. That rule has this application. The Federal courts leave it to the States to say, for instance, whether the bed of a stream or the bed of a lake shall be, so far as the fee is concerned, in the State or in the riparian owner.

Mr. MIGNAULT. But, Mr. Rockwood, the court of appeals in Quebec, my Province, has held that the bed of a nontidal navigable river, whose volume of water rises or falls according to seasons, extends to the highest water mark it reaches without flooding. That is our law.

Mr. ROCKWOOD. Our law is the same, with a possible difference in definition of "high-water mark"; whether the high-water mark is the same I should have to take a little more time to consider.

Mr. MIGNAULT. Where a river or a lake varies according to seasons, the highest point which the water reaches without flooding is the high-water mark.

Mr. ROCKWOOD. I think that rule is substantially like ours, although our courts have not used, so far as I know, just exactly that language. I have quoted the latest definition of our own supreme court, the State supreme court that I referred to a moment ago, on page 21 of my brief. I have not found in the Federal decisions any attempt at a precise definition of what the high-water mark is. If they have made a definition, it has escaped me.

Mr. MIGNAULT. I understand that the definition which has been made by the courts of your State is the limit between vegetation and nonvegetation as being the high-water mark?

Mr. ROCKWOOD. No; Mr. Commissioner. I think it is——

Mr. MIGNAULT. That is what I understand. Of course, I am speaking subject to correction.

Mr. ROCKWOOD. In that case in Fifty-sixth Minnesota Reports, which was quoted by the engineers in their report, Judge Mitchell said, among other things, that land which, in ordinary years—not every year, but in ordinary years—produces an agricultural crop, for instance, hay, is upland. He has left open to be decided what is an ordinary year. That definition by Judge Mitchell is indefinite, and it is so recognized by the later decisions. If you will refer to page 21 you will find the language of our supreme court in the latest case I know of on this point, and I will read just a sentence from page 22:

> It is probably true that, by reason of the recession of the water of the lake in years gone by, shore land has been exposed and made suitable for agricultural purposes. But all thereof within the ordinary high-water mark is subject to reclamation by the public for the interests of the general welfare, and the rights of the riparian owner must yield to that right.

Mr. MIGNAULT. What lake was in question?

Mr. ROCKWOOD. It was a little internal lake; but the rule is the same for Lake Superior as for the smallest lake in the State if it is big enough to be recognized as a public lake.

Mr. MIGNAULT. Would the converse of that proposition be true where the water of a lake has gradually risen and the land has been covered, that this land would become a part of the bed of the lake?

Mr. ROCKWOOD. If by natural causes, it would.

Mr. MIGNAULT. Yes. I quite appreciate, however, that an artificially caused obstruction will cause it to be affected by the act of another; but if it comes through a natural cause, then the bed of the river extends to the high-water mark. What our courts hold is that the high-water mark is the high water without flooding, and where the river remains within its banks when it rises in its annual variation so far does the bed of the river extend.

Mr. ROCKWOOD. Mr. Commissioner, it will be remembered that it appeared that the shore line of the Lake of the Woods has changed somewhat, and illustrations were given of changes that have occurred on the ocean and elsewhere, independent of any artificial causes. When those changes occur and the bed changes from natural causes the public right goes with it. For instance, a river may entirely leave its natural bed and take a new course. The Missouri River is constantly doing that and cutting off sometimes hundreds of acres at once, leaving the old channel and following a wholly new channel. The public right goes where the water goes. It goes to the new channel if it is made by natural causes.

Mr. MIGNAULT. And as compensation the owner of the land where the new channel is situated is entitled to the old channel?

Mr. TAWNEY. No.

Mr. MIGNAULT. Did you say that?

Mr. POWELL. I think you must limit that by gradual accretion, Mr. Mignault.

Mr. ROCKWOOD. It is true with reference to boundaries that it is limited to accretion. When a stream gradually changes by imperceptible degrees the riparian ownership changes with it, and the riparian ownership follows the gradual change. When a stream, as suggested, takes a new cut-off and leaves the old bed, abandons it and cuts off a large chunk of land at once, then the riparian ownership does not follow the change. The riparian ownership remains as it was. The State boundaries remain as they were. The boundary between Nebraska and Iowa, for instance, is the Missouri River. There are numerous places where, because of these violent changes, not occurring gradually, but occurring by cutting new channels, Nebraska has territory on the Iowa side——

Mr. MIGNAULT. On both sides?

Mr. ROCKWOOD. On the Iowa side, and Iowa has territory on the Nebraska side. But if the change had been imperceptible, the State boundary would have followed the stream.

Mr. POWELL. The principle of common law would apply?

Mr. ROCKWOOD. Exactly.

Coming again to the ownership of the bed, in Michigan the courts have determined——

Mr. POWELL. How is that going to affect us?

Mr. ROCKWOOD. I understood from suggestions that it would be claimed to affect the measure of damages.

Mr. MIGNAULT. It is pertinent to your argument, so far as it shows that anything beyond high-water mark would not be involved.

Mr. ROCKWOOD. Yes; I was going to come to that, sir.

Mr. POWELL. It is on that basis?

Mr. ROCKWOOD. Yes; that the rule of compensation is the same, whether the fee of the bed of the stream is in the riparian owner or in the State. In Michigan the fee of the bed of a stream is in the riparian owner; but when the United States wants the stream for navigation purposes it does not have to pay for it; it has to pay for the upland only. In Minnesota the fee of the bed of a stream is in the State.

Mr. MIGNAULT. Like in Quebec?

Mr. ROCKWOOD. Yes. And there the rule of compensation is the same. The public right in every case extends to high-water mark. Beyond that the private ownership is complete and compensation must be made.

Mr. MIGNAULT. That gives me a good opinion of the law of Minnesota. It is like the law of Quebec.

Mr. ROCKWOOD. It is natural that it should be.

Gentlemen, I have been standing here longer than I expected to. I have two suggestions. I think that future progress should be by treaty and not by statute. It is very difficult to get concurring statutes. It is very difficult in cases that run into complications and into a mutitude of details, as this probably will. There should be either a reference under this section 10, which would be equivalent to a treaty, or a new treaty out and out.

Mr. TAWNEY. Do you mean for the final settlement of this matter on the basis of the conclusions and recommendations of the commission?

Mr. ROCKWOOD. Yes; assuming that those recommendations are going to result in something.

Mr. MIGNAULT. You say that would be the better way to carry it out?

Mr. ROCKWOOD. It seems so to me.

Mr. POWELL. Our reference, instead of being a reference, should be submitted to us for adjudication to make a final wind-up of.

Mr. ROCKWOOD. With this qualification: If there is a reference, my impresison is that this commission should not assess damages, but should be authorized to make the proper application to the courts for assessment of damages. That question is a somewhat technical matter. Under our due process of law provision there must be a hearing by a tribunal that is, of course, not interested. It has been held that a tribunal that is conducting proceedings is by that fact an interested tribunal, and that, consequently, the assessment of damages must be made by some other. I do not know whether it would be applied here or not; but the absolutely safe way would be to apply to the courts.

Mr. MIGNAULT. We are not anxious to assess damages.

Mr. POWELL. I notice in your brief that you referred to method A and method B. You say it is not now practicable. I notice you make just a slight allusion to it. Will you tell us more fully about that?

Mr. MIGNAULT. If it will not interrupt your argument.

Mr. ROCKWOOD. It will not interrupt my argument if I make it a little broader.

I believe that the conclusions that are reached by this commission, so far as they are to be expressed, should be confined to a gen-

eral field; that is to say, I think the commission should recommend the high-water mark. It goes without saying that I think that should be the highest high-water mark that the physical situation will permit; 1,062.5 for the water and 1,064 for condemnation. Those are the minimum figures that should be considered. It seems to be conceded that there is going to be no attempt now to value individual pieces of land or classes of land. There will be a broad general estimate, and it seems to me that it is sufficient if that is within a considerable range.

I have not attempted to make any computations of what the total will be, but if you should come to the conclusion that it is between four and six hundred thousand, or between five and eight hundred thousand, or between two and three hundred thousand, that is near enough. In the nature of things, it is an estimate anyway, and can not be anything but an estimate, and I think it should be within rather broad fields. The project is so big as to justify, in my judgment, all the possible damages.

Mr. TAWNEY. Would that be, in your judgment, a compliance with the requirements of the two Governments under question 2?

Mr. ROCKWOOD. I think it would be, because that question was necessarily asked in view of the powers of the commission. If you had power to fix finally, if you had power to foresee, if you had prophetic power to foresee what commissions or juries will do, who have the final judgment to express, then you might get down to within a dollar. But, so far as I see, all that you can do is to estimate what some one else will do and estimate the aggregate. In the nature of things, if you had a fixed, definite opinion within a very narrow limit, you could not know that somebody else would reach the same result. When you come to take property each one is entitled to trial substantially by himself—trial of his own case—under our law. Each individual must have his day in court, notice, opportunity to bring his witnesses, to be represented, opportunity for argument, and so on; in general, all the formalities of court procedure, although it need not necessarily be in court; but the opportunity to be heard must be the same as if it were in court.

Was not this question asked in view of the fact that you can not make a final determination and can only predict what will be the result in the tribunal or tribunals who will have the final determination? It seems clear to me that your finding will be only in the nature of an estimate and not a finding at all in the strict sense of the term.

Mr. TAWNEY. In that connection, I will remind you, Mr. Rockwood, that in the hearings on the question of land values it was stated by the chairman of the commission that the commission was not determining the question of value, but only to estimate and report. It did not intend to decide anything.

Mr. ROCKWOOD. I remember that; I had that in mind in saying what I did.

Mr. MICHAUD. We are not making an award; we are not doing what the Geneva Arbitration Court did—award damages in gross, leaving to the country to whom the damages were paid to apportion the amount amongst the claimants. All we are doing is expressing an opinion as to the value of the lands which are involved.

Mr. ROCKWOOD. In the aggregate.

Mr. MIGNAULT. In the aggregate.

Mr. ROCKWOOD. It seems so to me.

Now, coming to the question suggested by Commissioner Glenn, it seems to me that the only thing to do is to make possible all that is possible at the outset; in other words, to create the instrumentalities, and to leave to the experience and wisdom of the future the choice, for instance, between method A and method B and modifications of A and B or other methods, if there are other methods. It would be more than marvelous if you could anticipate as well and accurately what method A will do or what method B will do as experience will demonstrate. No engineer assumes to know that he can forecast results exactly, and, of course, no engineer knows what the variations or what the cycles of wet years and dry years are going to be. A method that might be possible in a wet cycle, for instance, might not be possible in a dry cycle immediately following.

The time will come—I think it will come very much sooner than we imagine—when every pound of this power, the whole length of the river, every pound that can be developed, will be developed. Think of it! The question of developing this power did not arise until a little more than 10 years ago. How long, Mr. Campbell?

Mr. CAMPBELL. 1903.

Mr. ROCKWOOD. About 13 years ago. Substantially half of it is now developed, or ready to begin whenever financial conditions clear up. It would have been under way now except for the war and the financial stringency that resulted from the war. Half of that great power coming into use in the first 13 or 15 or 20 years. The rest of it will come faster. There is not enough water power anywhere where men can live and are living; there is not enough anywhere. There is not enough in Niagara, if it were all thrown open. It would all be used in a little while. The uses for water power are multiplying. We have an agricultural continent that is unfertilized in the sense in which fertilization is known in the denser populations of Europe. There fertilizers can be produced by water power and are being produced by water power, nitrates, as they are called. There are other products; for instance, the manufacture of aluminum and the making of carbides which consume power in quantities which can not be estimated, and the demand for such products is immeasurable. If aluminum, for instance, were cheapened, the demand for power would bound and bound and bound, and we could not supply that demand. That process may come. Some other process may come; and it is just as certain as anything can be that we do not realize in fact what the demands for this power in the next generation are going to be. They will be something that we can not conceive of now.

The one thing it seems to me that this commission should do is to see that it does not do anything that will tie the hands of the next generation and limit the possibilities of this water power. Every inch of elevation that can be added, if it can be used once a year, equals in the neighborhood of $100,000 in value every inch. The addition of a foot, if it is utilizable, adds in the neighborhood of a million dollars, computing power at $10 per horsepower. The values and the possibilities are simply beyond the conception of any of us, and the one thing most of all that should be in the minds

of this commission and of everyone who acts with any responsibility toward this development, is to see that nothing is done and nothing is permitted to be done that will tie the hands of the future. When these levels are once established on the Lake of the Woods and on Rainy Lake—and Rainy Lake is just as much a part of this scheme as the Lake of the Woods itself—when those levels are once established improvements will be made in reference to them, and it may simply be assumed that there can not be any change in the future. You will act now for all time on that question; and, as I have said and repeated, the only possible mistake is a mistake of restriction. You can not make the plan too big.

Mr. POWELL. Boiled down, as I boil it down in my own mind, the commission should provide the amplest means of regulation, but leave to experience the adoption of the methods.

Mr. ROCKWOOD. Exactly that, Mr. Commissioner.

Mr. TAWNEY. You made the statement that Rainy Lake was a part of this proposition, just as much as is the Lake of the Woods. Suppose the commission in recommending levels to be established at the Lake of the Woods should find that the present conditions in Rainy Lake afford all of the storage necessary for the regulation of the Lake of the Woods within that range of levels; that is, that the present maximum level of 497 and 492 should be sufficient for storing all the water necessary for regulating the Lake of the Woods. Would or would it not be within the province of the commission under these levels, then, to make any recommendation whatever with respect to the lands submerged under present conditions and the value of the lands submerged under the present conditions at Rainy Lake?

Mr. ROCKWOOD. It would still, Mr. Commissioner, be within the province of the commission to do that, for this reason: While private capital has built that dam, thinking that it had the right to build it, that right is contested, and if those who are contesting the right should turn out to be correct in law, then the 497 is not secured.

Further than that, I think, Mr. Commissioner, that your "if" is an impossible if.

If I may add just a word: I was handed yesterday, by one of the engineers, a table that I had not seen before. I have no doubt it will be put before the commission by the engineers. While I have not had time thoroughly to digest it or to make sure that I know exactly what it means, I understand it to mean that a storage of 150,000,000,000 cubic feet in Rainy Lake over a storage capacity of 100,000,000,000 cubic feet is sufficient of itself to pay the income on more than all that this improvement will cost.

Mr. TAWNEY. To what improvement do you refer?

Mr. ROCKWOOD. The improvement of the Lake of the Woods—the whole improvement.

Mr. TAWNEY. That is, the opening, widening, and enlarging of the discharge capacity, the discharge area of the Lake of the Woods, and everything else?

Mr. ROCKWOOD. The computation means this, as I understand it, that if there are 150,000,000,000 cubic feet available for manipulation, for discharge at the proper time and in the proper volume down Rainy River, it will result in raising the minimum discharge from the

Lake of the Woods by an amount sufficient to pay the income on the entire cost of the whole project.

Mr. TAWNEY. Including the purchase of land?

Mr. ROCKWOOD. Including the purchase of land and everything. This was just handed to me.

Mr. TAWNEY. What engineers? Our engineers?

Mr. ROCKWOOD. Yes, sir. Mr. White handed this to me. I am making this statement perhaps in advance of what I ought to have made; but here is the result: Assuming a minimum discharge of 8,000 cubic feet out of Rainy Lake, if the storage capacity is 100,000,000,000 cubic feet in Rainy Lake and above, and the draft is 7 feet on Lake of the Woods, then, the minimum out of the Lake of the Woods will be 11,700 cubic feet. If the storage capacity is 150,000,000,000, that minimum is increased to 12,120, or 420 cubic feet per second.

That 420 cubic feet per second, in its flow to Lake Winnepeg, will develop 11 times 420 continuous horsepower, or about forty-five or forty-six hundred continuous horsepower, which, at $10, is worth $45,000 a year. That is interest at 4 per cent on $1,000,000.

There is the value of a million dollars in that extra storage in that one little item of extra storage on Rainy Lake. I think the million dollars will pay damages, and then some.

Mr. MIGNAULT. Are you asking the commission to recommend that the level of Rainy Lake be any higher than 497?

Mr. ROCKWOOD. Certainly, Mr. Commissioner.

Mr. MIGNAULT. What limit do you put on the level of Rainy Lake?

Mr. ROCKWOOD. Five hundred.

Mr. MIGNAULT. Have you considered the damage which would be caused by raising the level from 497 to 500?

Mr. ROCKWOOD. I have not, except in a general way. I have not been able to make a computation; but taking all the figures that have been put before this commission as the values of lands placed upon them by the owners, which I think is beyond the actual value, and a good way beyond—a hundred dollars an acre, or whatever it may be for those wild lands up there—there are a few acres of the shore lands—the summer-resort lands—that are worth a hundred dollars an acre. I concede that. But going outside of that——

Mr. MIGNAULT. Outside of the agricultural lands, it would affect industrial property?

Mr. ROCKWOOD. That would have to be protected by proper works, and it can be taken care of. It can be done.

Mr. MIGNAULT. Assuming, Mr. Rockwood, that with 60,000,000,000 cubic feet of storage on Rainy Lake at a level of 497, and 30,000,000,000 cubic feet of storage affected by the Kettle Falls Dam, in all, about 100,000,000,000—if a hundred billions of storage is sufficient, what reason would there be to have the level of Rainy Lake go above 497?

Mr. ROCKWOOD. Mr. Commissioner, I can only answer that by asking to have a definition of "sufficient." In my judgment nothing is sufficient so long as there is anything more in sight.

Mr. MIGNAULT. But Rainy Lake, so far as I look at it in this memorandum, is before us as a storage proposition. We are not asked to regulate the levels of Rainy Lake; we are asked to regulate the levels of the Lake of the Woods, and it may be necessary, in order to regulate the levels of the Lake of the Woods to regulate the

levels of Rainy Lake, to use Rainy Lake as a storage basin; and the point is this: Even if you require 150,000,000,000 feet of storage, with 497 on Rainy Lake, the remainder of the 150,000,000,000 can be obtained on the upper lake. What reason would there be for letting the level of Rainy Lake go above 497?

Mr. Rockwood. Nobody yet has suggested how 150,000,000,000 can be achieved without carrying Rainy Lake to 500.

Mr. Mignault. I may be wrong, but I understand that it is possible to get the balance of storage, if I may use the expression, on the upper lakes so as to bring up the total storage to 150,000,000,000.

Mr. Rockwood. If there is any such data already in the record it has wholly escaped my attention.

Mr. Mignault. I may be wrong, but that is my impression.

Mr. Rockwood. I do not remember any data that would justify you in thinking that the additional 50,000,000,000 can be found above Namakan, Mr. Commissioner.

Mr. Mignault. Of course, Mr. Rockwood, if we come to the conclusion that the only storage required is 100,000,000,000 there would be no reason, obviously, to go above 497 on Rainy Lake, because we have the storage as it is.

Mr. Rockwood. Then, in respect to that, I might come again to that question of the definition of what is "enough," what is "sufficient"?

Mr. Tawney. Supposing, in the judgment of the commission 100,000,000,000 storage was sufficient for the regulation of the level of the Lake of the Woods, what would you say as to the necessity of our giving consideration to lands that were submerged on Rainy Lake?

Mr. Rockwood. I can not conceive, Mr. Commissioner, of reaching the conclusion that anything is enough so long as there is something just beyond that is available by the expenditure of a little more money. I can not conceive of it. It is 20 years since I began familiarizing myself with water-power questions. When the proposition was made to divert 600 cubic feet per second from this watershed to Duluth we contested it and we contested it before a pound of water was in use at International Falls. It was a considerable time before development began there. We were met almost with a scornful laugh. The idea of trying to save any water at International Falls! There was so much water down there at International Falls that nobody would ever dream of using it. We knew better. My clients went ahead and improved that water power, and improved it to the full extent. It was two or three years in that dry period before they could fairly keep the wheels going for the development they had. We have increased the development, and are increasing it. Fortunately, nature has increased the water supply in the last year or two, and they are getting along better. But the time is quickly coming again when there will not be water enough there. The time is coming when there will not be water enough in the Winnepeg River; and the time is coming, as surely as we sit here, when there will not be water enough in the Nelson River, and it is not far away, either.

I can not bring myself into the state of mind at all, of saying we have enough when there is a good bit more just beyond that is available, with proper and reasonable expenditure. There has not been

one single figure suggested here yet that would, it seems to me, justify the commission in saying that "we will stop short of a full development on both lakes because the expenditure is too great." I do not think there has been a figure suggested by anybody.

Mr. GLENN. It seems to me, when we follow your argument down to the final analysis, you think we ought to maintain the level of the lake at as high a level as we possibly can for the purpose of utilizing all the power of the lake, even though, in doing so, we have to damage private property by taking private property that can be compensated for in dollars and cents, and that you are willing and would take the ground that we should put the damages for the injury of that private property, as high as we think is necessary, but that use of power is multiplying to such an extent that in the future the whole country would suffer and could not be protected by anything like pecuniary damages?

Mr. ROCKWOOD. Exactly that; just exactly that. I think every inch of private property that is taken should be fully paid for. It always is paid for, and if the rule suggested of adding 10 per cent or 20 per cent to the actual value were adopted, we would not stand in the way. Our courts do not take the view that that is just as against the public, but if it is just it should not stand in the way, because even then there is not enough of it to stop the full development. That is exactly what I think.

Mr. GLENN. If we do not give you the full development the future will suffer?

Mr. ROCKWOOD. Exactly that; and it will suffer sooner than we realize.

Mr. TAWNEY. Do I understand you to say, Mr. Rockwood, that we should not then make any definite provision whatever in our conclusions or recommendations as to the amount of storage that should be developed for the purpose of regulating the level of the Lake of the Woods, leaving it to the result of experience in future years to determine just how much storage is necessary?

Mr. ROCKWOOD. Not exactly that, because if the maximum is not created now the possibility of it will be lost by increasing private improvements. For instance, it would be almost literally impossible to raise the level of Lake Superior by a foot above natural high-water mark. There are so many cities and docks, so many improvements on the border to be affected, that as a practical proposition I suppose it could hardly be considered. The shores of these boundary lakes are wild and for the most part unoccupied. The improvements are of a temporary character. The expense, for instance, of paying for the village of Warroad, if that were necessary, would not be such a big item. There are hundreds of those cases—not hundreds, but many cases—where communities very much more populous than the village of Warroad have been removed to create water supplies. It has been done in the vicinity of New York; it has been done in the vicinity of Boston, and elsewhere, but, of course, with compensation.

There is not one thing to-day valuable enough and important enough on the shores of either of these lakes to prevent that full development. We do not know when that situation will change; in the course of years it will change. So that, in my judgment, what

should be done now is to mark the highest limit of development on both lakes that physical circumstances will permit and to pay the damages. Then leave the regulation of the power or use of the water below and within that maximum.

Mr. MAGRATH. And not to adopt either regulation A or regulation B?

Mr. ROCKWOOD. It seems so to me, Mr. Commissioner. That is a question for future law, for future consideration, to be determined in the light of experience, and not to be governed by any hard and fast rule laid down now.

Mr. MIGNAULT. In other words, if the maximum level is sufficiently high the storage will take care of itself.

Mr. ROCKWOOD. That is the only thing, Mr. Commissioner.

Mr. MIGNAULT. You will not forget, Mr. Rockwood, to give me the information I requested?

Mr. ROCKWOOD. I have asked the secretary to see that I do not forget.

Mr. MIGNAULT. I should also like to have information as to this litigation, what is being asked for in these cases, whether they are mere damage suits or whether they are asking for the removal of the dam. If it is merely a damage suit it does not affect the existence of the dam.

Mr. ROCKWOOD. That is not as I understand it.

Mr. MIGNAULT. But if the prayer is to have the dam removed, then we must consider the possibility of the court's ordering its removal.

Mr. ROCKWOOD. There is one suit for the removal or the lowering of the dam by, I think, 4 feet, or something of that kind.

Mr. MIGNAULT. By a landowner?

Mr. ROCKWOOD. By a landowner who owns land between the dam and the mouth of the lake.

Mr. MIGNAULT. And the court has the power to grant that prayer?

Mr. ROCKWOOD. Oh, certainly.

Mr. MIGNAULT. That is a suit before the courts of Minnesota?

Mr. ROCKWOOD. That particular suit is in the United States district court at Duluth. There are a lot of other suits for damages, mostly in the local district courts—the State district courts.

Mr. MIGNAULT. The damage suits do not affect the existence of the obstruction?

Mr. ROCKWOOD. Except this, Mr. Commissioner: If the plaintiffs in those actions can recover damages, then the water must be kept down——

Mr. MIGNAULT. Or the damage paid?

Mr. ROCKWOOD. The permanent damage paid.

Mr. MIGNAULT. Now, another question, if you please. Have you, under your statutory authority, the right to condemn the land up to the high level that you wish to see maintained?

Mr. ROCKWOOD. I think so.

Mr. MIGNAULT. You think so.

Mr. ROCKWOOD. I think we have. I do not know but it would be conceded that we have.

Mr. SAMUELSON. It would not be conceded as far as the settlers are concerned.

Mr. MIGNAULT. If you can elaborate that a little I would like you to do so, without going into any undue development; the point being this: If you have the power to acquire the right of flowage up to a certain level by process of condemnation, we would like to be informed.

Mr. ROCKWOOD. We have the power. The company that owns the dam is a company for the improvement of navigation, and the statutes give companies of that character the power of eminent domain.

Mr. MIGNAULT. Your statement is that you have the power.

Mr. ROCKWOOD. We think we have. It is just like some other questions; it is contested. We do not know where we will land so long as there is a contest.

Mr. TAWNEY. There is one other phase of this reference that we should like to have touched upon. Personally, I would like to know what your views are. We are asked to make some recommendations with respect to the regulation of those works which we may recommend or which are in existence for the purpose of regulating the level of the Lake of the Woods. What is your idea as to the character of that regulation and the authority that should be created for the purpose, and the extent of that authority both as to new construction and as to dams and compensating works that are now in existence?

Mr. ROCKWOOD. Mr. Commissioner, on that point I have not tried to go beyond this, that there should be created by legislation or treaty a tribunal, and I have assumed it would be this tribunal, to act in an administrative capacity and adopt the precise details of the improvement and carry them out——

Mr. TAWNEY (interposing). Are you familiar with the plan of regulation that the commission adopted in the matter of the development in St. Marys River at the Soo?

Mr. ROCKWOOD. Only in a general way. I understand that there is a working arrangement to which the two Governments have each assented. It has not been given the sanction of positive law.

Mr. TAWNEY. That is a case where the commission had final jurisdiction.

Mr. ROCKWOOD. I have not followed it up.

Mr. TAWNEY. Under the treaty, article 8 of the treaty, we have the power of imposing any condition that may be necessary for protecting the interests of the people on both sides of the line, and one of the conditions was that these works be placed under the control of an international board consisting of two persons and be operated under rules and regulations to be prescribed and prepared by the International Joint Commission. I was wondering whether you had given any consideration to that matter.

Mr. ROCKWOOD. I can not suggest anything better than that. I had simply that idea in general terms.

Mr. TAWNEY. We would like to get the views of the interests in these various questions as we go along so that we may know to what extent our recommendations may be in accord with the desires of the people on both sides as well as the desires of the two Governments?

Mr. ROCKWOOD. If I could reserve the right to make suggestions in the future if I find myself wrong, I am prepared now to say that

I think that is the right method; that it should be incorporated in the treaties.

Mr. TAWNEY. It is understood, I would say, by members of the commission in the procedure yesterday that there would be no hard and fast rule here with regard to representatives of any interest or any community being heard again in rebuttal if they desire to say anything further.

Mr. ROCKWOOD. I am through, I think, with the reservation that after I have heard others I may have very briefly something to add.

Mr. POWELL. The height you contend for at the level of the lake is what?

Mr. ROCKWOOD. As a minimum, 1,062.5. If the banks will permit more, then more; but in any case we would like to have it maintained, if possible, at 1,062.5 every day in the year.

That necessarily would mean that there should be a flexible margin above that which ought not to be less than a foot or a foot and a half.

(Whereupon, at 12.35 o'clock p. m., the commission took a recess until 2 o'clock p. m.)

AFTER RECESS.

The commission reconvened at the expiration of the recess.

Mr. GARDNER. Mr. Campbell, if you are prepared to proceed, we are ready to hear you now.

ARGUMENT OF ISAAC CAMPBELL, K. C.

Mr. CAMPBELL. Mr. Chairman, in presenting the case for the power interests of the city of Winnipeg I will briefly refer to one or two matters with which you are familiar. Our power is situated on the Winnipeg River some fifty-odd miles below the Lake of the Woods outlets and also below the junction of the English River with the Winnipeg River. We transmit the electrical power generated there to the city, a distance of 77 miles. The Winnipeg Electric Railway Co., for whom Mr. Laird appears, has a power below ours. They have a shorter transmission line, some 64 miles in length. Up to the present the city has put in turbine and electrical machinery for about one-half of its possible power, and is using perhaps one-half of what it has installation for. I do not think we are using at present over 30 per cent of what will be available from the water coming down through the river to our dam.

Mr. GARDNER. What is the relative volume of the two rivers?

Mr. CAMPBELL. I am not quite sure, but I think they are about 60 and 40.

Mr. GARDNER. Is the Winnipeg River larger?

Mr. CAMPBELL. The volume of the Winnipeg River coming from the Lake of the Woods is about 60 and the volume of the other is about 40. Regulation applied to the other river would no doubt increase the amount of power available from it in the future, but not so much as regulation would on the Lake of the Woods. Up to the present, therefore, we are not acutely interested. When we reach the limit of possible use, we will greatly care for the result of your proceedings, and to show how much we are really interested I can give

you figures that are in evidence. In the testimony of Mr. Kensit, which you heard at Winnipeg, it was shown that since the installation of the Winnipeg Electric Railway's power, and since they began to deliver energy in the city in 1907, a period of a little less than nine years at the time he was speaking, the city had increased in population 102 per cent; it had more than doubled; while in that same time the consumption of the hydro-electric energy had increased 513 per cent, or 5 to 1 instead of 2 to 1.

Mr. Rockwood referred this morning to the probable future uses of electricity. It is only a few years since the transmission of electrical energy for long distances was begun. It is only a few years since it was thought of. It was first spoken of about 1889 or 1890, when the electrical transmission for street railway purposes was first commenced. Since that time a variety of new uses, before unthought of, have occurred to electrical users, and the probability is that in the future there will be many more. Mr. Rockwood mentioned some of them, one being the extraction of nitrogen from the atmosphere for the purpose of fertilizers. Of course, if that were taken up seriously, there would be an infinitely large use for electrical energy.

In answer to your question, Mr. Chairman, I referred a moment ago to the comparison between the Lake of the Woods and the English River possibilities under regulation. Some increase would be afforded on Lake Seul on the English River. But I need not take up your time in referring at any length to a matter of that kind, because I think Mr. Rockwood has shown that we may expect within a very few years that there will be an indefinite increase in the demand for electrical power. Mr. Kensit testified that for the last eight and a half years there has been an increase of over 20 per cent per annum. I do not know whether Mr. Kensit stated it or not, but the fact is that the population of the city of Winnipeg in the last year and a half has not increased at all; yet, notwithstanding that fact, there was in the year 1914, when conditions were unfavorable, an increase of 13 per cent in the amount of electrical energy used over that used during the preceding year, showing that the increased variety of uses is accountable for a disproportionate ratio between the population and the consumption of power.

The Lake of the Woods is a very important body of water for our consideration. Its own area is 1,500 square miles. Its watershed comprises about 26,000 square miles. In consequence of that and of the run-off it has in a state of nature been subject to very wide variation in levels, very different from Lake Superior and the other Great Lakes, where the watershed is far less in proportion to the size of the lake, and where, as in the case of Lake Superior, there has been only an extreme variation in 60 years of some three and a half feet, and that occurring not in any one year, but representing the difference in height at times separated by several years. That very fact makes the Lake of the Woods so important. If there be no regulation upon it we would fail then to get the benefit of the storage, or rather of the draft on storage, so as to equalize the outflow from it.

Mr. GLENN. Mr. Campbell, if you had regulation would it make very much difference whether it were kept at a level of 1,058 or 1,059 or 1,062?

Mr. CAMPBELL. To my clients it would make no difference. We would be quite indifferent as to the height if you can give us, say, a range of 5½ to 6 feet. Whatever range you give, if we could have that and have it at a low level instead of a high one, the Winnipeg users—that is, the users down the river—would be quite indifferent as to what the stage of water might be in the lake as measured by sea level datum.

Mr. GARDNER. What you are concerned in is uniformity of flow?

Mr. CAMPBELL. Yes; the uniformity of flow; and the height only becomes important to us because we know that there will be a minimum height below which you will not allow the regulation level to fall.

I will speak generally of the flow of the water in the Winnipeg River as a matter concerning the community. We have been able since Winnipeg commenced delivering power to reduce the price. It was first reduced by the electric railway from 10 cents a kilowatt-hour to 7½ cents. The city came in, and it has been reduced now to a basic rate of 3½ cents for domestic users, and that is subject to a discount of 10 per cent, bringing it down to 3 cents, while large power users are able to get power supplied at less than 1 cent per kilowatt hour. The electric railway company, which is the city's business rival, so far as the two corporations are concerned, has had to follow the reduction in price. So it is the community that is getting the chief benefit from the installation of hydroelectric generators and the water-power plants below the lake.

It is unnecessary to add to this anything excepting one matter, and I think I could say that as between regulation and entire absence of regulation there would be a difference in the value of the power to the users below the outlets represented by about three to two. The unregulated flow would afford us two-thirds of the energy spread over the year that we could have with regulation when using up to all that our power plants were ready to provide.

The evidence contains estimates showing that for the last nine years there had been an annual increase of some 21 or 22 per cent per annum. In the last year, when circumstances were unfavorable, it was 13 per cent, and Mr. Kensit made the computation that if we assume only an annual increase of 8 per cent in the future, it would take only 26 years before the whole of the possible power on the Winnipeg River, including the English River, would be made use of, and then for further increases there would have to be a resort to installation of auxiliary plants, steam or otherwise. We can not foresee the future, but seeing what has happened in the last nine years, and when an estimate is made of a percentage of only a trifle over one-third of what the average increase has been in that period of nine years, I think we can conclude that taking 8 per cent for 26 years is a very modest estimate of the possibilities of the future.

Mr. GARDNER. What are the total possibilities in horsepower?

Mr. CAMPBELL. I am not quite able to tell that. We can give that information in round figures, but when electrical engineers commence talking to me about the difference between 24 hours' continuous horsepower and the horsepower at peak load I get a little bothered. I think I understand it; but I agree with President Lincoln. His test was that you only understand a thing when you can

explain it clearly to somebody else, and I am not sure, therefore, that I do understand it. But, in general terms, Mr. Chairman, I can give it. The power for 24 hours in the river—that is, the power coming from the Lake of the Woods, inclusive of English River—would be, when fully developed, about 270,000 or 280,000 horsepower; and with the power in the English River, which is a good deal less than the remaining 140,000 now, could be brought up by regulation so as to make the totals that have been presented to you of about 420,000 horsepower possible in the future. But it depends upon the pondage and upon the use that is made of it. We expect about a 70 per cent load factor and have 7 square miles of pondage. In the winter for two or three hours a day the peak load comes on and the rest of the day the pond slowly fills up. We are thus able to run it up to the 100 per cent, and it is expected that the Winnipeg City power will be able to develop 70,000 or 75,000 continuous 24-hour horsepower and furnish a peak load according to the requirements of the citizens and the city itself, of perhaps 100,000 when it is fully developed. I am speaking now in round numbers.

Mr. GARDNER. And you state that an 8 per cent increase for a term of 26 years would utilize all that power?

Mr. CAMPBELL. Yes. That estimate of 8 per cent, Mr. Chairman, applies to the whole river. It was made by one of the Canadian Government engineers. But if that went on for 26 years at an increase of only 8 per cent, all the available water would then be called into use—all the head or fall throughout the whole of the river.

I think, Mr. Chairman, it has been stated generally that the Winnipeg River—meaning by that the river including the contribution to it from the English River—is equal to 409,000, or, perhaps, 420,000 horsepower; and, as I understand it, that means continuous horsepower, and the peak load, according to the requirements of the community, might bring that up so that they could sell day by day, along with their own use, up to 550,000 horsepower, but a large share of that increase would only be used two or three hours a day.

Mr. GARDNER. That, of course, includes the Rainy River watershed?

Mr. CAMPBELL. All that; yes, and the English River also.

Mr. MIGNAULT. Perhaps I should be mindful of the proverb that fools rush in where angels fear to tread. With regard to the peak load, I understand that it is the extra demand on the plant during certain hours of the day.

Mr. CAMPBELL. Yes.

Mr. MIGNAULT. As to the 24-hour continuous horsepower, that would include, I should imagine, the peak load during certain hours and the less demand during the rest of the day?

Mr. CAMPBELL. Yes, sir; during the other hours. In the north our day in the summer is about 2½ hours longer than it is here at Washington, and I think 2 hours longer than it is in New York. In the winter we have the very opposite. Our lights have to be turned on an hour and a quarter earlier in the evening and kept on an hour and a quarter longer in the morning than in this latitude. Then, at 5 to 6 o'clock, when the people are going from the center of the city to their homes, preparation is being made for dinner and the factories are all going, comes the time for the peak load.

We are fortunate in having 7 square miles of pondage for our own plant. That will always afford us some advantage in being ready to take care of a peak load. Then, during the other hours, from 2 o'clock in the morning until half past 5, when the street railway commences operation, and when people are asleep, the consumption goes down and the pond is filling up to be ready for next day's peak load.

There may be some discussion later about the regulation by methods A and B. There seems to be general agreement that a decision as to these should be postponed a few years. As Mr. Rockwood pointed out, the regulation of the Lake of the Woods may have some effect even upon the far-away Nelson River, to which the commission has not yet given its attention. But I can not speak of what that effect would be. I presume it would be something. There is between the outlet of the Winnipeg River and the commencement of the Nelson River a fairly large lake, the Winnipeg Lake.

Mr. MIGNAULT. Which is larger than the Lake of the Woods.

Mr. CAMPBELL. Which is larger than the Lake of the Woods; but what the effect would be I can not say.

Mr. MIGNAULT. Possibly any effect of regulation, so far as the Lake of the Woods is concerned, would not be noticeable when the water left Lake Winnipeg.

Mr. CAMPBELL. It might not be when spread over the other lake; but that would be a matter for engineers and for engineers only after they have made a topographical examination of the lake.

Mr. MIGNAULT. We have had nothing placed before us.

Mr. CAMPBELL. Nothing has been placed before you, and I do not know that Mr. Rockwood was referring to it so that you could measure it. He was no doubt referring to it as one of the matters which give increased importance to a regulation in the Lake of the Woods.

Mr. POWELL. Is it in contemplation to use the power on the Nelson River?

Mr. CAMPBELL. No one has done anything with it. The Manitoba government has appointed one or two engineers to make an examination, but at present there would be no demand for it. The population down there is very sparse.

Mr. POWELL. Is it practicable to transport the electricity?

Mr. CAMPBELL. I am told that engineers think it will be feasible before long. With the use of the alternating transmission system they think longer distances can be covered than any yet achieved. It would be longer from there, unless there be some uses nearer to the head of the river than any yet developed. I think the longest is in the State of California, longer a good deal than anything we are doing between the Winnipeg River and the city of Winnipeg. But that matter will depend probably upon mining developments and whether or not there are undiscovered natural resources to which the development benefit could be applied. We have, from men who have gone down the river and from merchants and traders who live and deal down there, very glowing reports of what the water power of that great river with a fall of a little over 700 feet is likely to result in, but I can not offer the commission any information that would be sufficiently definite upon which to base any conclusion.

Then, we who are down the Winnipeg River, taking the whole river into consideration, are, of course, much more interested than all those together who are at the outlet. The height of their head is about 19 feet. The remaining height is some 271 feet, making a total of 290 feet. I have been treating the matter as about 14 or 15 to 1 in the relative difference of the heights. Mr. Rockwood had some figures this morning from the Dominion Government report which makes the difference somewhat greater, but as to that I do not think anything turns on it, because I think that the volume and the fall are sufficient to show how extremely important it is, whether the total be 290 feet below the Lake of the Woods to the other lake—the Winnipeg—or whether it be 320 feet.

There are some questions, Mr. Chairman, which I had been looking at, but until I learned after passing a pleasant day at the Capitol yesterday that the power interests were to present their argument first, I assumed that counsel representing the Government of the United States and the Dominion of Canada would settle, or at least discuss, several of the premises which struck me as standing almost in the forefront; and while I have formed some opinion I am not prepared now to put it forward. That applies also to some of the cases in our own Canadian courts and in the Supreme Court of the State of Minnesota. I think that will come better from the other counsel, and that there are several of these matters that I can pass over, but, to avoid having the record blank as to the position of those representing the power interests, I may refer very briefly to them. The commission will expect to have the argument presented by them and it would be eminently improper for me to take the place of Government counsel.

The reference to the commission is under article 9 of the treaty of March, 1909.

Mr. TAWNEY. The date of the treaty is January 11, 1909. For your information I would say that about a year ago I had some correspondence with Mr. Root, in which I referred to the date of the treaty as the date of promulgation, and he called attention to the discrepancies in some of our publications in which the date of the treaty was referred to as the date on which it was signed, the date on which it was ratified and the date on which it was promulgated; and he informed me that the rule of the Departments of State of both Governments in referring to the date of a treaty is to refer to it as the date of the signature to the treaty. We have adopted the policy of referring to it as the treaty of January 11, 1909.

Mr. MIGNAULT. It is so stated in the treaty itself in these words:

Done at Washington the 11th day of January, in the year of our Lord one thousand nine hundred and nine.

Mr. CAMPBELL. Well, nothing turns on it; it is not a part of my argument. I was merely referring to the date of the treaty in order to identify it. It was signed in January and ratified by the Senate in March.

Mr. MIGNAULT. So far as we are concerned, it is "the" treaty.

Mr. CAMPBELL. Yes; once it has been finally assented to and ratified that date could be taken as the one conventionally agreed upon. Under the treaty the reference comes in under Article IX, and I am not going to discuss some questions that have been referred

to now and then, because I think that can be left for the counsel of the high contracting parties, excepting one matter, and that is, the commission is requested by the reference to report if a stated level can be named. Reference is made to a level during different seasons. It seems to me that the use of the words "different seasons" may there indicate that it was to be seasons of any one year or different seasons in a succession of years, and that, therefore, the word "level" could be read as plural, because otherwise there would be difficulty in making a regulation unless it be one fixed level for the whole 12 months, and if the water allows it for each succeeding 12 months. The commission has a right to report on that. In that way it would be more favorable to us than to have only one fixed level for all the time named. It occurred to me that the use of the language in that way of reference to the different seasons allowed latitude enough for that.

Mr. MIGNAULT. As a matter of fact, it would not be possible to maintain the water of the lake at one fixed level for all times.

Mr. CAMPBELL. Of course, during flood times it would be quite impossible, but even outside of that you could not keep a fixed ordinary high-water level.

We would like to have a range, Mr. Chairman, of 5½ to 6 feet. In the very important evidence of Mr. R. S. Lea, C. E., given at Winnipeg, the reason for that is given. In the table offered by Mr. Rockwood to-day the figures are given as to the difference for each foot of draft or storage. We would like the widest possible range. We thought of 5½ feet. It would be better if we could have 6 feet. Five feet has been the tentative range upon which your engineers have made most of their deductions. I need not add to what Mr. Rockwood has said. He has given you the difference in second-feet and has referred to the fact that going down that river for every cubic foot of water that goes from the outlets of Lake of the Woods to Lake Winnipeg the fall is such that there can be generated 26 continuous horsepower. It is merely a matter of arithmetic to show how important it is. An additional foot of storage obtained when the inflow is large, as against a drier time later, and as against the draft when the inflow is not equal to the outflow, would give us 420 cubic feet per second more. It is a matter of simple arithmetic to determine the horsepower and make an estimate of the increased value.

Then, on the question of the treaty itself, I merely want to enter a remark or an appearance so as not to have some one state that we had overlooked that. A fair interpretation of the treaty recognizes the existing uses of the waters of the Lake of the Woods at the outlets as matters stood when the treaty was made in the beginning of 1909. It recognizes those uses under article 8. It recognizes the existing uses hitherto permitted by article 3, and, I claim also, under article 4.

Mr. MIGNAULT. How would you construe the words "hitherto permitted," as used in the treaty?

Mr. CAMPBELL. I have had the advantage of looking over Mr. Tilley's argument in the St. Croix case and your discussion, Mr. Commissioner. At that time I suppose that the argument was not intended to be exhaustive, because it was not necessary for his case.

Mr. MIGNAULT. Yes; he abandoned discussing that point after I had told him that if he relied on it he had better discuss it fully.

Mr. CAMPBELL. It was not necessary in that case.

Mr. MIGNAULT. It is possibly material that in article 8 and in articles 2 and 3 of the treaty the Commission is rendering a decision. Here we are doing nothing but making a report which will contain certain recommendations, and anything we may recommend will not by itself affect any existing uses. I assume that the question of whether uses that existed at the time of the treaty should be understood is a matter for the Governments to consider.

Mr. CAMPBELL. I quite agree with the position that the question before the commission is in a different form from what it would be if it came up under article 3 or article 4.

Mr. TAWNEY. It seems to me that it is reasonable to suppose that the two Governments will not expect us to make recommendations that would be in conflict with the treaty in respect to existing uses. I think that is why it is important to discuss it at this time.

Mr. CAMPBELL. Exactly. Article 9 is a request for information, practically that is all. The commission is requested to investigate, report, and recommend. But I take it that the treaty is to be read together, and that it was never contemplated that under article 9 something would be done based on recommendations which ignored the other clauses.

Mr. MIGNAULT. Yes; I quite agree with you.

Mr. CAMPBELL. It seems to me that the law between the two countries is to be found in the other articles of the treaty, and upon international law.

Mr. MIGNAULT. And is founded on the doctrine of vested rights.

Mr. CAMPBELL. Yes; unless in the diplomatic arrangements some surrender has been made by virtue of benefit to be obtained from the general operation of the treaty. Article 3 applies strictly to boundary waters, and it contains those introductory words in addition to the words, "hitherto permitted." I may not be quoting them in their exact order, but that is the meaning of the words as they begin the article. I would take it that the meaning of the words "hitherto permitted" might be wider than Mr. Tilly put it in that other case. He put it this way, that "hitherto permitted" referred partly to his own case where the permission had been given by one Government prior to the treaty, but the works had not been gone on with or, at any rate, not completed, and that that was the case where the private interests had obtained a vested right, and that he really did not need to come to the commission. It seems to me that "hitherto permitted" might be read as much wider than that.

Mr. MIGNAULT. Yes; as being something which was not illegal and contrary to law.

Mr. CAMPBELL. As being not illegal and in which the Government of the country in which the works were constructed had made no objection and its citizens had made no objection.

Mr. MIGNAULT. Of course, in Mr. Tilly's case we were dealing with a boundary stream, one-half of which was in each country, and, consequently, my view was that the words "hitherto permitted" could only refer to a permission given by the two countries; but that would not apply here. Here, possibly outside of the question of the International Falls Dam, all the works are in one of the countries,

and the only permission that could be considered material would be the permission of the country where the works are situated.

Mr. CAMPBELL. I might refer to a work well known both in the United States and Canada, which is shortly referred to as Cyc. In 30 Cyc, page 1461, the following appears:

> Permit. As a noun, a license, an allowance, a suffrance, a toleration, an authorization.

It might be something authorized, licensed, or something suffered or tolerated.

Mr. MIGNAULT. In other words, silence might be consent.

Mr. CAMPBELL. Silence might be consent; at any rate, if it were long enough continued to afford an opportunity for the citizens or the Government officers to know of the existence of the work and they should make no objection to it. The definition in the cyclopedia continues:

> As a verb, not to hinder, not to prohibit or prevent; to allow by not prohibiting; to allow or consent to; to authorize or give leave to consent; to allow or suffer to be done, to tolerate, to put up with.

Mr. MIGNAULT. In other words, where it is not forbidden it is permitted?

Mr. CAMPBELL. Yes. There is all through this two senses, an active sense for the verb "permit" and a passive one. They run in order.

Mr. MIGNAULT. They are rather mixed up. I am afraid some of these definitions go so far that when it is not a negative it is a positive, and when you want to apply them conversely it is confusing.

Mr. CAMPBELL. It proceeds:

> To grant leave or liberty to by express consent; allow expressly; give liberty, leave, or license to; to allow to be done by consent or by not prohibiting.

Mr. MAGRATH. Are you going to follow that up, Mr. Campbell, by making a practical application to this case?

Mr. CAMPBELL. I think I can.

Mr. MAGRATH. You say you will do so?

Mr. CAMPBELL. Yes, sir.

Then there is a distinction drawn in the footnote on the same page that the word "permit" is distinguishable from "consent," which implies some positive action, while the word "permit" implies mere passivity.

In volume 6, Words and Phrases, page 5315, "permit" is in one sense synonomous with "suffer" or "allow," but it is also equivalent to "give leave," license, or authority.

The words "permit" and "suffer" are pseudo synonyms. There is a shade of difference between their meanings. The word "permit" seems to convey the idea of affirmative action more than the word "suffer."

There is no need of my making a choice between these passive or active meanings of the word "permit," so called, because the evidence before the commission is that the first dam, the Rollerway Dam, built in 1887, and which affected the water at the outlet until the winter of 1894 and 1895, when the present dam was constructed, was constructed under authority of the Government of Canada.

Mr. MIGNAULT. Under express authority.

Mr. CAMPBELL. Under express authority and by arrangement with the riparian owner or the owner of the water privilege and the Government in addition to that contributed $7,000. I think a reference is in the evidence or the "text" of your engineers' report as to the year in which the statute was passed providing the $7,000 in the Canadian parliamentary budget.

In that case there was no regulative control provided for, because that dam was a submerged weir. There were no gates and no sluices. It simply had the effect of raising the water from 2 to perhaps 3 feet, according to the best information obtainable.

The present dam was built in 1894–95, and in 1898 the government of the Province of Ontario became interested in it and made an arrangement more extensive than what the Dominion Government had. The provincial government contributed $4,000 for the construction of the dam, and entered into an agreement that they should have an inspecting engineer who would regulate the height of the water and under whose instructions the employees of the company, the owners, should act, and that arrangement has continued up to the present. That is in respect to the Norman Dam. If the permission of one government is sufficient, and the use of the words "hitherto permitted" in article 3 does not demand that we have permission from both Governments, there is the most ample proof that those words have been satisfied by the action of the Dominion and Ontario Governments in the way I have stated.

Mr. TAWNEY. Mr. Campbell, in that connection, I wish to call your attention to this proposition. Article 3 says:

> It is agreed that in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto, no further or other uses or obstructions or diversions, etc.

Article 4 says:

> The high contracting parties agree that except in cases provided for by special agreement between them, they will not permit the construction or maintenance on their respective sides of the boundary, etc.

With reference to your statement to the effect that we could not in making our recommendations get outside of the treaty, and that if we made any recommendations affecting existing obstructions, or obstructions that were heretofore permitted, we would be outside of the provisions of the treaty, I call your attention to the language used in article 9, which is as follows:

> The high contracting parties further agree that any other questions—

That is, any other questions besides those referred to in article 3 or article 4—

> or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report.

Is it your judgment that the language used in article 9, "agree that any other questions," is not to be taken into consideration independent of any of the questions referred to in articles 3 and 4; and could we not, therefore, and would it not be our duty under this reference under article 9 of the treaty, to report our conclusions and

recommendations even in respect to obstructions that were heretofore permitted or authorized before the existence of this treaty?

Mr. CAMPBELL. I scarcely think so.

Mr. TAWNEY. Any other question than those referred to in articles 3 and 4 may be referred by the two Governments under this treaty, and the two Governments reserved the right to make any special agreement in regard to future obstructions or to obstructions that may heretofore have been made.

Mr. CAMPBELL. Must not reference under article 9 be something that is different from things that could be decided either under article 3 or article 4?

Mr. TAWNEY. That is true.

Mr. CAMPBELL. I had not thought of it quite so definitely as you have put it, Mr. Commissioner, but it occurred to me that without this reference at all your commission could have acted under applications made under articles 3 and 4 as a judicial tribunal, giving final decisions upon nearly everything that is involved in this reference, but there would have to be separate applications made to do that, and I do not know that the commission could envisage the whole matter in any one of them. For instance, there is the question of the Rainy Lake regulation so far as it affects the Lake of the Woods. There is included here also what would not come up under article 3 certainly, and might not alone under article 4, your judgment and your investigation as to the waters flowing out of the Lake of the Woods. But outside these questions all the "matters" of this reference could be dealt with under 3 and 4.

As to any installation at the outlet of the Lake of the Woods that could come before you under an application by an interested party who wanted to prosecute the work or by way of complaint by somebody who wanted to object to a work that was being commenced, I do not think there would be any possible way to bring all such matters before you in one hearing unless by a form like this, and so the departments of the two Governments that are dealing with it saw that the question was so broad and covered matters that under articles 3 and 4 could not be dealt with singly, that under article 9 it became another "matter," but in form only, not in substance.

Mr. TAWNEY. But as I interpret article 9 it is possible, under the authority contained therein, for the two Governments to refer any question to us that might have been brought before us under either article 3 or article 4 and any other questions referred to here under article 9. In other words, it covers the whole field and all questions or matters of difference arising between the two countries or the inhabitants of either. So that article 9 is broad enough to include everything, and if, as a result of this investigation under article 9, it becomes necessary for the two Governments to deal with an existing structure or one that had been in existence prior to the making of this treaty, then the two Governments could deal with it, notwithstanding the fact that it was in existence prior to the making of this treaty.

Mr. CAMPBELL. I suppose that right exists.

Mr. TAWNEY. If it exists, that disposes entirely of this question of vested rights.

Mr. CAMPBELL. No matter what the other clause of the treaty means, the two Governments could come together and do that at any time—treaty or no treaty.

Mr. TAWNEY. They could do it on a reference and a report of this commission on that reference.

Mr. MIGNAULT. They could do it without our recommendation.

Mr. TAWNEY. They would do it, then, with the knowledge and information which this commission would furnish after a full investigation of all the facts.

Mr. MIGNAULT. Our Parliament could destroy vested rights. I doubt whether yours could.

Mr. TAWNEY. I do not think the Congress of the United States could.

Mr. MIGNAULT. I do not think it is very material, if I may say so with all due deference. I think that under article 9 any question, even questions which might have arisen under articles 3 and 4, can be referred to us, because it is merely to get our opinion. The Governments might desire to have our opinion as to an obstruction, say, on the Niagara River which might affect the beauty of the scenery. The Governments can consult us as to any subject, and not necessarily subjects relating only to boundary waters.

Mr. CAMPBELL. Article 10 is somewhat definite as to the commission being a judicial body, but, taking the two together, no international tribunal that I know of has wider jurisdiction, if something will invoke it on either side of the line. It covers the whole field, either in matters of national honor or territory or anything else.

Mr. MIGNAULT. That is to say, that under article 9 either of the countries alone could refer any matter to the commission for its report and recommendations.

Mr. TAWNEY. That I question.

Mr. MIGNAULT. It seems to me that that is the distinction between articles 9 and 10, that under article 9 one of the Governments alone can act. Under article 10, where the commission would decide a point, the consent of the two is required, and, furthermore, as to the United States the consent of the Senate is also required.

Mr. TAWNEY. If you will permit me right here—because this question has arisen before and, no doubt, will come up again—I would call attention to the fact that it says: "Whenever either the Government of the United States or the Government of the Dominion of Canada shall request." That is, when one Government makes a request of the other the questions or matters of difference shall be so referred. That is the interpretation which the two Governments have put upon it. When one Government requests the other Government to submit or refer questions to us, the other Government has no choice but to grant that request under this treaty; but neither Government can, without making request of the other Government, refer any matter to this commission or invoke its jurisdiction under article 9.

Mr. MIGNAULT. I think the last words of article 9 show that either Government may do so.

Mr. CAMPBELL. That is only a matter of formalism.

Mr. TAWNEY. It is a matter of form; but the matter is referred then with the consent of both Governments. I do not think either

Government alone can invoke the jurisdiction of this commission under article 9.

Mr. CAMPBELL. Neither Government alone could approach the commission direct.

Mr. TAWNEY. I called attention to this matter because it has been referred to so frequently in this investigation.

Mr. CAMPBELL. But if the Government receiving the request from the other is to transmit it to the commission, it is tantamount to a request on the part of the one Government only.

Mr. MIGNAULT. It all amounts to this, that if one of the countries initiates a reference and communicates the point to the other, the other under the first paragraph of article 9 has agreed in advance that the question shall be referred.

Mr. TAWNEY. The point I want to make is that the question comes from the two Governments. Neither Government can individually invoke the jurisdiction of the commission.

Mr. CAMPBELL. When it comes before your commission both Governments have concerned themselves.

Mr. MIGNAULT. But it can be initiated by either one.

Mr. MAGRATH. Mr. Campbell, you hold that in these references, no matter what the language of the references may be, we are limited by the terms of the treaty?

Mr. CAMPBELL. Yes; but I quite concede that in any discussion as to how to interpret the treaty the action of the Governments in a case that was ambiguous would be something for you to go upon. The two Governments have referred this matter, and if the rest of the treaty were consonant with it it might be taken to show that what they thought about the treaty was entitled to considerable weight, but if articles 3, 4, and 8 are clear, and in addition articles 2 and 5—article 2 as to navigation rights and rights of suitors, and article 5 containing a similar declaration as to the Niagara River—if those preserved vested rights, then I submit that under article 9 reference should be had to the preceding clauses to show the rights that the parties had on either side of the boundary, and that article 9 would be read subject to them, because the other clauses provide a rule of ascertaining or interpreting the rights of parties affected. Article 9 does not provide any rule for that; it merely provides for investigation and report. But, Mr. Chairman, I want to escape the responsibility of acting here as counsel for one of the high contracting parties. I was merely mentioning this matter in order to show that the city of Winnipeg was not overlooking it. I simply argue that article 9 is to be read subject to articles 3 and 4 in respect to all matters which could have been dealt with under 3 or 4.

Mr. TAWNEY. You are not trespassing on anybody's rights at all.

Mr. CAMPBELL. I am afraid I am, and the trespass is all the worse if I get matters so that my friends, Mr. Keefer and Mr. Anderson, can not unravel them.

Article 4 contains language in a different form owing to a different set of circumstances. It says that they "will not—i. e., after the date of the treaty—permit the construction or maintenance" of any works that shall affect the height of boundary waters. The use of the word "or" there might at first sight, and just looking at it

as we read ordinary English, indicate that the Government, having permitted the construction, should take some steps to abate the continued maintenance of the Norman Dam, if it be found to affect the natural levels of the waters. I submit that the difference in the character of the work and the situation that was being dealt with explains the reason for the use of the word "or." Supposing the Norman Dam had not been constructed, but was in contemplation—the Canadian Government was a party to its construction, as was also the Ontario government—and the Canadian Government agreed not to permit the construction or maintenance. Now that, I submit, does not apply to the Norman Dam, which was an existing work; but it is some future work, some future dam or obstruction, to which article 4 applies. Along the boundary waters there may be works constructed that would fall within the class that would be defined by my use of the word "permitted" from the thirtieth volume of Cyc, without public officers knowing of it and without the inhabitants knowing of it. If that work which they agreed not to permit is permitted passively after the treaty—after the treaty, not before its date—that is a work that they must see to the abatement of under the second part of the covenant "construction or maintenance."

Mr. MIGNAULT. In other words, they will not permit the construction of such a work, and if such a work is constructed in spite of their permission, or through their passivity, then they will not permit it to be maintained and operated.

Mr. CAMPBELL. I submit that that is the only fair way in which those words can be read. My learned friend, Mr. Laird, has a case involving a similar phrase in a statute regarding litigation that I will not delay you now in quoting.

Mr. MIGNAULT. It is a rather usual form of expression.

Mr. CAMPBELL. I think it is a quite usual form where we have in view the future works that may be commenced but which will not be maintained or proceeded with. I will not trouble the commission with referring to article 2 at length, but at the end of the first paragraph of article 2 it makes provision for injured parties obtaining the same legal remedies as the citizens of the country in which the work doing the harm occurs. It provides further that "This provision shall not apply to cases already existing or to cases expressly covered by special agreement between the parties hereto." These latter words, of course, are provided for elsewhere and carry their own meaning. It is the first part of those two lines that I refer to. So that existing cases are there protected.

In article 3 the words are:

> In addition to the uses, obstructions, and diversions heretofore permitted, * * * no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission.

Article 5 refers to the Niagara River, a totally different case. But there, too, the same principle, though not so clearly expressed, is introduced into the article and has to be made out by reading practically the whole paragraph with which I will not trouble you.

Article 8 gives the commission its jurisdiction. I suppose probably jurisdiction could be implied or inferred from the preceding articles

in the respective matters that are mentioned in them, but article 8 specifically provides for the jurisdiction that the International Joint Commission shall possess in regard to matters with respect to which under articles 3 and 4 of the treaty the approval of the commission is required. The third paragraph of article 8 provides an order of precedence or of relative importance which you shall attach to various classes of use for which water is desired, namely, sanitary purposes first, navigation second, and power and irrigation last. If there were a conflict between those uses, that order of precedence would govern your permission to use the water. In the seventh paragraph of article 8 it is stated, "The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary"; that is, existing at the date of the treaty.

There are a large number of authorities on the construction of statutes and some on treaties. In general they agree excepting, I take it, that in a treaty you can look at extrinsic evidence that perhaps a judge would exclude in regard to a statute. In a statute evidence can be given as to the state of circumstances existing at the time, but not what parties have declared or what a legislator declared when he voted for the statute or introduced it into Congress or Parliament. I have not made an exhaustive study with regard to a treaty, but I take it that the negotiations of the parties, a report of the Secretary of State communicated to the other side, and correspondence leading up to the treaty could be looked at to interpret any language used. But, apart from that, the general language of a treaty if clear in itself leaves no room for construction outside of its own language.

The question of navigation I will not discuss, except in this way: Our rights will have something to do with questions of navigation, but there is not much need of my presenting an argument, because I find from looking at the evidence and at the decisions that could be applied, that as to navigation there is very little difference in the figures. The witnesses examined at Kenora and, I think, at least one at Winnipeg, Mr. Stewart, chief hydrographer for the Dominion of Canada, indicated the stage of the water proper for navigation as 1,060 to 1,061 sea-level datum. The correspondence which has been put in between the United States Army engineers and the War Department at Washington, a part of which was transmitted to Canadian authorities, indicated in 1905 a desire to have a stage of summer level on the Lake of the Woods, based on the Warroad gauge, of 7.2 above zero, which is equivalent to 1,060.8 sea-level datum. By taking the figures showing the mean level of the lake for the 16 years, 1893 to 1908, both inclusive, we get a level of 1,060.49, practically 1,060.5. I would like Messrs. Meyer and White to verify that. I could not reach them last night, and I had it done by another gentleman in whose competence I have the utmost confidence, but I am giving the commission these figures from my own side of the case, and I desire to have it from the engineers of the commission.

When I say 1,060.49, almost 1,060.5, I refer to the mean level maintained during the four months of all those 16 years, June, July, August, and September, the four months of June to September, inclusive, for the years 1893 to 1908, inclusive. During some of those years the level for those four months was 1,061.60, a little over a foot higher than the mean level for the whole 16 years as applied to those four months.

If that be taken as ascertained, it seems to me that that indicates a high-water level for those four months of practically 1,061, or a little over that, because that would throw out of any use or value the land within those 6 inches immediately above that height of water maintained for those four months. There is no possible vegetation on or use of land that is under water from the 1st of June to the last day of September, excepting possibly a very small amount of pasturage for cattle.

Mr. MIGNAULT. Do you state that that was the mean stage of water for those four months?

Mr. CAMPBELL. Yes; for those four months for the 16 years mentioned. Of course, in one or two years it was down to about 1,057. And afterwards it was 1,057 in the years 1911 and 1912. I do not think there was anything below 1,059 for those 4 months in the 16 years referred to, the mean stage being practically 1,060.5.

Mr. MIGNAULT. Was that the average level?

Mr. CAMPBELL. Yes; it would be practically that, because I notice, in looking at the tables, that the water was maintained at a steady stage. I suppose there may be a slight difference between average and mean level, but the difference would be infinitesimal.

Mr. MIGNAULT. If you desire, you could ask Mr. Meyer or Mr. White if there is any difficulty as to this point you are making.

Mr. WHITE. We will look that up.

I mention them because I am getting these figures from information suplied by a gentleman who is not an officer of the commission.

Mr. POWELL. What were those months, again?

Mr. CAMPBELL. The four months June, July, August, and September.

Mr. POWELL. That is, four what you might call agricultural months?

Mr. CAMPBELL. Exactly; yes, sir.

Mr. POWELL. I suppose that the corollary that you wish us to deduce from that is this, that inasmuch as those were the only months that really affected agriculture, you can not make any allowance for flowage below that?

Mr. CAMPBELL. I think that would be urged as the legal result, although, when I come to speak of compensation, I feel like I would be justified in saying a little more than that, probably.

The figures for the last 19 years—1897 to 1915, inclusive—made just a trifle lower than 1,060.5; 1,060.2 is the evidence on that, as given by Mr. Stewart at Winnepeg; the season of that being the two very low years—two years lower in the later period by several feet than had occurred at any time during the period that I have taken, and I have taken the 16 years just prior to the bringing-in force of the treaty.

On the word "normal" I desire to say a word—"normal" or "natural." Those two words occur in the reference, and I will just make reference only to four or five places in the evidence. I am not going to trouble your commission with a discussion as to the use of the English of those two words "natural" and "normal." But I wish to refer to this other use in correspondence that may at least give a meaning to the word "normal" to show that as used in the reference—as used anywhere—natural and normal might refer to two different things.

Mr. MAGRATH. Just one expression, "natural or normal"?

Mr. CAMPBELL. Yes.

Mr. MAGRATH. They refer to different things?

Mr. CAMPBELL. Two different things, possibly so. When the departments of the two Governments were making the reference, they used both words. Those words are in paragraph 2, in the second line:

> And if such level is higher than the normal or natural level of the lake.

I confess that when I saw that three years ago I thought the intention was that one of the words was a surplusage. They seemed to mean the same thing, most of us having one idea in mind, and would treat them as having the same meaning, though perhaps there is a shade of difference that makes the thing a little narrower, but it is the one thing that the speaker or writer is thinking about.

Mr. MIGNAULT. The language of statutes is diffuse. They use a lot of expressions in a statute where one would suffice, where one is used in the code.

Mr. CAMPBELL. Sometimes that happens. I submit that in this case——

Mr. MIGNAULT. In what case?

Mr. CAMPBELL. In the present case before the commission. The word "normal" may be read as having one meaning, and the word "natural" another, and that the word "normal" would refer to the level of the water as it existed since the dams were put in or since the regulation.

Mr. MIGNAULT. What would "natural" refer to?

Mr. CAMPBELL. "Natural" might, as some of my professional brethren have suggested, mean that also. Natural level, under the conditions existing at the time of the treaty or at the time of the reference, must vary from what would have been the conditions under an absolute state of nature.

Mr. TAWNEY. Does not that follow from the use of the disjunctive "or"?

Mr. CAMPBELL. The other two lines——

Mr. TAWNEY. No; the same. Referring to two different conditions they use the word "and," the conjunctive "and."

Mr. CAMPBELL. Not in this case, Mr. Commissioner.

Mr. MIGNAULT. I think it is used in the sense of "and."

Mr. CAMPBELL. If that is the case, if they used what is the natural and normal level without making "level" plural, I think that would mean the one thing. "Natural or normal" level may mean one thing. I do not urge that it means two different things.

Mr. POWELL. Read what follows and see what a maze you will get in.

Mr. CAMPBELL. If that is going to be the result, I shall have to avoid contempt of court, Mr. Commissioner. I will take warning.

Mr. MIGNAULT. The word "normal" is even more elastic than the word "permits," which you illustrated a minute ago. At first sight I would say I would read it this way, as if it said:

> And if such level is higher than the normal; that is to say, the natural level of the lake.

That is the way it struck me at first sight. But I am open to conviction.

Mr. CAMPBELL. Higher than the normal or natural level of the lake?

Mr. MIGNAULT. "The normal"; that is to say, the natural. They use the word "normal" in the sense of "natural," do they not?

Mr. CAMPBELL. I am not going to argue as to the meaning of the reference looked at alone without reference to the other articles of the treaty. It is capable of either meaning, there is no question about that.

Mr. MIGNAULT. What I have suggested is a possible meaning of the word.

Mr. CAMPBELL. If a certain stated level—that is, your level, the level that you state—is referred to, that is singular; that is put here in the sense of being one thing. But there is nothing that I can see in the language, when it comes to "natural or "normal," but what that stated level may be——

Mr. MIGNAULT. It goes on and asks us to determine the value of the lands that would be so submerged, submerged over and above a certain level, which level is referred to as being the normal or natural level. It seems to me that normal and natural mean the same thing, because, obviously, we have to start from a fixed point, and this fixed point is not two different things; it is one thing only, and that thing is the normal or natural level of the lake.

Mr. CAMPBELL. Yes; I feel the force of your remark.

Mr. MIGNAULT. So it seemed to me that they had not in mind two different levels but only one.

Mr. CAMPBELL. Then, I submit, we can use the word "natural" as applicable—natural under the conditions existing, bringing the word "natural" to mean what I interpret the word "normal" would be if used alone.

Mr. MIGNAULT. On the other hand, it can be said that the normal one is referred to in the sense of the natural.

Mr. CAMPBELL. If they both refer to the one thing, that is quite true; and I will leave that to other counsel to urge.

Mr. POWELL. You see, it is a very bad thing to pick out one or two words in arriving at the meaning of a section, or of the whole statute, for that matter. If a certain stated level is recommended, and if such level is higher than the normal or natural level of the lake, to what exent, if at all, would the lake, when maintained at such level—that is, the level that we recommend—overflow the low-lands upon this side of the border or elsewhere on this property, and what is the value of the lands which would be so submerged? According to your contention we would have to give two answers: We would have to give an answer in regard to the normal level, and we would have to give an answer in regard to the natural level.

Mr. CAMPBELL. I do not wish to put the commission to that trouble. It does not follow, Mr. Commissioner, that because you would have to do that, that is not the meaning.

Mr. POWELL. Under what you and Mr. Commissioner Mignault have said I will limit the extent of my interpretation to this, that if they mean the same thing——

Mr. POWELL. Is it not better to regard this as it is ordinarily regarded? This is not scientific language; it is simply the loose, unscientific way of saying it. It is not the language of science. In

arriving at the general idea one form contributes a little and the other contributes a little, and you must deduce from the use of the two what they mean, if you possibly can.

Mr. MAGRATH. I suggest that we allow Mr. Campbell to proceed and state what he thinks it means.

Mr. CAMPBELL. I think I have been interrupted very little.

Let me read, Mr. Chairman, how the word "normal," at any rate, has been used by men who were charged with responsibility and who were asked to investigate matters relating to the height of water in the Lake of the Woods both before and after the date of the treaty.

In a letter written by the Acting Secretary of State, Mr. Francis B. Loomis, to the British chargé d'affaires, who was Mr. Hugh O'Beirne, dated Washington, May 6, 1905, appearing in the evidence at page 463 of the Winnepeg hearings, he asked for the setting out of facts that were reported as to the Keewatin Power Co. and its dam and the height of water, and expressed the desire that the waters should be kept up to a datum of 7.2 on the Warroad gauge, 1,060.8. He closes the letter by asking if the addressee will be so good as to lay the matter before the proper authorities of the Dominion with a view to reaching the suggested understanding as to the maintenance of the "normal" level of the lake in question.

That is replied to by the British officer, in which he uses the word "normal": but, being merely an acknowledgment of the letter, his use of that word would not carry any significance.

In a letter which appears on pages 475 and 476 of the Winnipeg record the word "normal" is again used in a report made by Maj. Francis R. Shunk, of the United States Engineer Corps and addressed to some superior, in which he makes use of the word "normal."

Mr. MIGNAULT. Neither of these letters refers to the natural levels?

Mr. CAMPBELL. No; neither. His report is made to the Chief of Engineers of the War Department. At that time the complaint was begun about the low level—the low level under the then existing conditions, the dam being in use. He refers to 7.2 about the tenth line of the letter:

7.2 on the Warroad gauge is mean lake level during the navigation season. Mean low water during navigation season is just about a foot lower than this, or 6.2.

That would be 1,059.8.

Mean lake level for the entire year is 6.6.

That would be 1,060.2.

The adopted depth therefore gives 9 feet at mean level during navigation season; 8 feet at mean low water during navigation season, and 7 feet at a stage 1 foot below low water during navigation season. It is my opinion that the allowance is ample, and that dredging to greater depth would not be proper under the approved project.

2. A channel of the above described depth has been completed, but will require work of maintenance from time to time.

Your commission has evidence from various witnesses about that. Maj. Peck was amongst them; and owing to greater depth from dredging being proposed at Warroad he pointed out that he could do with a lower height of water if the works were carried out.

Then, in paragraph 3 of that letter, an excuse for the weather is offered or for the low stage of water:

As has been mentioned in sundry reports from this office 1910 was by a large minority the dryest year on record in Minnesota. The usual spring rains did not occur, and the lake has been falling since last winter. Toward the close of the season, when the *Knute Nelson* had her difficulties, the available depth was less than 6 feet. But I do not think that the project need be modified because of the events of one very exceptional year. It is reasonable to suppose that the normal lake level will be restored.

The next letter is on page 478 of the same record, put in, as I think, as Exhibit 19. But it appears in the record of the Winnipeg evidence. The discussion had been as to the effect of a dam being installed at Kenora and the heights of the water owing to stages of low water and the dry season. Then, two lines from the bottom:

Altogether the flow of the river below, with the dam supposedly closed, seems to be at least equal to half the flow of the river in its natural state. This is undoubedly one cause, and a very considerable one, of the slow recovery of normal level in that lake.

Mr. MIGNAULT. In that letter both the terms "natural" and "normal" are used.

Mr. CAMPBELL. I did not notice that. Where is the word "natural"?

Mr. MIGNAULT. "Natural state," the words "natural state" referring to the flow of the river in its natural state.

Mr. POWELL. Just a sentence or two before you stopped, four lines from the foot of page 478.

Mr. CAMPBELL. I think that is the flow of the river, not the height of the water. "Natural" flow; "normal" height or level.

Mr. POWELL. No; it speaks of the river in its natural state and of the level of the lake when it is normal.

Mr. CAMPBELL. On page 479, in the same letter, in the sixth line from the top of the page, appears the following:

The stop logs were then put in, but too late to prevent the unfortunate conditions of last season.

That was the very low water.

There was certainly no ill intention in this manipulation of the dam, but it was merely a mistake on the part of the management, which is admitted and will probably not be repeated. It would not have been serious had not last season been very unusually dry, and I think that the lake would undoubtedly have recovered its normal level had the dam been watertight, as it ought to be.

Mr. MAGRATH. Who wrote that letter?

Mr. CAMPBELL. Maj. Shunk, of the United States Army Engineer Corps. He uses that word three times in this letter. It occurs in the eighth paragraph, on page 480.

Mr. MIGNAULT. To make that argument very effective I think you should have some connection between the words "normal" and "natural." Because Maj. Shunk uses the word "normal" in the sense which you give to it, it does not follow that when he refers to or uses the terms "normal or natural" that they mean what "normal" means in these letters of Maj. Shunk.

Mr. CAMPBELL. I do not know that I can do that. I am using the terms now merely to show what he deems to be normal level; and he certainly deems it normal under the then existing conditions of the dam. I take it that he knew quite well that if the dam were out

the then normal level would be as the engineers have computed it, nearly 3 feet lower during those 16 years or during any selected 16 years. The dictionaries interchange the meanings "normal" and "natural."

Mr. MIGNAULT. The argument, however, is not an irresistable one.

Mr. CAMPBELL. Few arguments are.

Mr. MIGNAULT. It seems to me that I could answer it.

Mr. CAMPBELL. In paragraph 8, on page 480, it again occurs:

While at Warroad I made observations as to the effect of the jetty on the channel. The bars which form at the mouth of the Warroad River have, it is believed, been caused by wave action in shoal water. During the past season the water having been below its normal level, bars have formed farther out than is usual.

There is an exhibit, No. 18. It is not printed. It is the report of H. C. Gould, an engineer to whom these matters were referred in 1912, I think. In the second last paragraph of his report his use of the word "normal" I can not urge as being very significant, because he discusses the question of levels in the lake and refers to Maj. Shunk's reports and quotes from them some of the sentences that I have read here, so he is probably not using voluntarily that word as expressing the meaning that he would wish to convey himself; but he quotes from those reports of Maj. Shunk in the second last paragraph in these words. It is very short, and I will read it:

In report dated June 30, 1911, supplementary to the report of June 9, 1911, Maj. Shunk describes three dams at the outlet of the Lake of the Woods, and expresses the opinion that the open condition of the dam at Norman is undoubtedly one cause, and a very considerable one, of the slow recovery of normal level of that lake.

When this reference was suggested in 1911 and made in 1912 it was low water that was complained of. The United States Army Engineers thought natural and normal were the same thing. Since then high water is the subject of complaint. Up to 1911 natural or normal was 1060.5, and the reference should be read to mean "if you report a level higher than that, then what lands, etc., will be submerged?"

I am only going to offer a word about compensation. I think, strictly speaking—and I am only mentioning it now for the record—that we could urge that below 1,060.5, probably below 1,061, that under the conditions existing in the terms of the treaty we could oppose compensation. I leave that for the Government counsel to discuss and to be arranged, because we had that existing state of facts for, now, 23 years, the use of that dam and the increased height of the level commencing certainly in 1893, or the winter of 1894 or 1895, with the slightly increased height for six years before that, somewhere apparently between 2 feet and 2½ feet. Strictly speaking, that 1,060.5 can be read 1,061, because the high-water mark would be above that mean level at which the water constantly was for four months in each year, 1893 to 1908. And after that, assuming those words to apply to the level under conditions as they have been for a score of years, we do desire a higher level to get the range we need. I say we desire a higher level, because we desire a wide range, and I do not think we could get the range we would like without having the level increased beyond what it has been. That is for the com-

mission, and you know the conditions as well as any of those appearing before you. For that additional level and for the foot or two feet in height of contour, the lands falling within an additional contour of a foot and a half, we should pay, and we should pay in full, although the riparian owners may for several years out of 25 be able to make some use of that foot or 1½ feet. But if they are liable to have it flooded 1 year out of 25, or 3 years out of 25, we can not with very good grace, nor with justice, and, I think, not within the law, object to paying them for the full value of the land; and in recommending that value, it seems to me that you are not limited to the strict market value, not only the 10 per cent spoken of to-day, but 20 or 25 per cent might be added.

Mr. MIGNAULT. Have you formed any idea, Mr. Campbell, of the amount which the commission should state as being the value of the land involved?

Mr. CAMPBELL. I can give some idea, but I would be like Mr. Rockwood—I could not tell closely about it. I am going to quote one or two of the witnesses to give a line on that value.

Mr. MIGNAULT. That is really one of the difficult questions which we have to determine, and we would like to have your assistance, so far as you can give it.

Mr. CAMPBELL. If you will allow me, Mr. Commissioner, just a moment, I will finish the topic that I was referring to.

Mr. GARDNER. I did not just get what you said in regard to the levels below.

Mr. CAMPBELL. I think we can ask that the level should be placed at 1,060.5. We might ask that it be placed a little higher, because the flood water was above 1,061 during those four months, and up to an average of half the time about 1,061.33. When land is submerged for 4 years out of 10 to a height of 1,061.33 feet, it is not going, below 1,061, to be of much value. It would not be worth while for the farmers staying there. But for that foot I am not pressing.

As to making the compensation, we should be willing to pay fairly and in that sense liberally for the land that is injured, and that would be either condemned or taken over or whatever would be the procedure that would be adopted.

Mr. MIGNAULT. When you say "we," whom do you mean?

Mr. CAMPBELL. The Canadian power interests, the Dominion Government, so far as they own the power, and those that are now allotted or in use; and I am speaking for the community of the city of Winnipeg that I think we ought to pay a fair share, our full share, and that there is no objection to its being computed fairly and liberally, not put at the exact market value of 10 per cent, but at 20 or 25 per cent, that could with safety be added to what would be the estimated market value. And, more than that, that value should, as soon as your report is acted upon, be paid, then; that is, be paid now, without waiting until the time comes when we will need to raise the water. We do not need to raise it now. We do not need any regulation now. My clients could get along if the Lake of the Woods were treated as now, and they probably will for 8 or 10 years be able to do so. But it is not desirable that either the riparian owners or ourselves should be in doubt about the legal height of the water available. It is not fair to them and not fair to us, and I think we should

pay the full amount of the compensation that should be charged against us—pay it now, and although interest would be running on the money it would be avoiding trouble and doubt and anxiety, which would be well worth the use of the money, although we would not have the use of the added amount of water.

Mr. POWELL. I would like to call your attention to one thing. You spoke of a range or level. We are here to find whether or not it is practicable to remedy the varying conditions as at present existing and to establish as nearly as possible uniformity, and it is only in case we do that that we have any power to go further. The other things are conditional on that. We have no power to extend the range at all.

Mr. CAMPBELL. No; but I have assumed that the commission intended to make some suggestions that were not strictly within those three questions.

Mr. POWELL. If we make a suggestion of a wider range of levels than is desirable, that ends it. We have no right to go any further.

Mr. CAMPBELL. I am not sure. You can not limit yourselves strictly to these questions, because they seem to contemplate one stated level.

Mr. MIGNAULT. It is impossible.

Mr. CAMPBELL. That, I suppose, is impossible, and it will therefore be a departure from them for that reason.

Mr. MIGNAULT. It would not be an answer to say one stated level is impossible. Should we not go further and say what is possible?

Mr. CAMPBELL. I think so.

Mr. MIGNAULT. That would be my view of it.

Mr. POWELL. The language must be taken with regard to a stated level and must be given a broader interpretation, but we can not give a broader interpretation in that manner. We are supposed to find it. No one would argue that you can go to work mathematically and fix it at 1,064 the whole year around; but we are to approximate that as closely as possible.

Mr. MIGNAULT. It really does not make any difference if we recommend a mean level, because that would involve the range.

Mr. POWELL. No; excuse me, I do not think this would establish a mean level. It says here:

> Is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and if so, at what level?

That is not a mean level, but a level brought down to as near uniformity as possible.

Mr. MIGNAULT. It does not necessarily mean the same level in each season of the year.

Mr. POWELL. But a mean means the resultant of a number of causes. It might be a great deal higher in one season of the year and a great deal lower in another. It is not the mean that we are after; it is to make a uniform level as far as possible. That is the purpose of the thing.

Mr. CAMPBELL. That can be worked out.

Mr. POWELL. Then, if we do that, certain other questions are to be attended to. We are to begin examination into values; we are to make further examination of means and methods and appliances

required to maintain that uniform level—not a mean level, but as uniform a level as is possible.

Mr. CAMPBELL. And what, from my point of view, is the most important part of it, the most advantageous use of the waters.

Mr. POWELL. They would not have to be taken together, but the objective point is getting a more uniform level throughout the year.

Mr. CAMPBELL. If that level be made a mean level——

Mr. POWELL. Oh, not a mean. You can have a mean level of anything. It is the purpose to get as uniform a level as possible throughout the year.

Mr. CAMPBELL. I do not think the commission will be able to make a useful report if you pin yourselves down to that strictly.

Mr. POWELL. I do not regard it as a limit; but the soul of the thing——

Mr. MIGNAULT. The soul of the thing, I think, means this, if it means anything: That we are asked to find what can be secured; that is to say, a certain stage of levels——

Mr. POWELL. Excuse me. Read the reference.

Mr. MIGNAULT (continuing). That is practicable and desirable.

Mr. POWELL (reading):

> Is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level, and if so, at what level?

That means not a mean level, but how far it is practicable to keep it uniform throughout the different seasons.

Mr. MIGNAULT. According to that view we will have to say "No, it is impossible."

Mr. CAMPBELL. I say yes. I say yes by giving the term "stated level" a wide meaning.

Mr. MIGNAULT. I think my brother Powell and myself have the same idea, but express it in different language.

Mr. POWELL. Take an example. A river may be the boundary between two farms. That is loose, ordinary language. Or a post may be the boundary between two farms. That is loose language. But what you are after there is to get the center of the post or the center of the river. One man does not come to the outside of the post on one side and the other man on the other side of the post, though the loose term "post" is used there as expressing the division line. And in this instance I take it that the same thing refers to the stated level. It does not mean down to an inch or a thousandth part of an inch.

Mr. CAMPBELL. I was asked as to the amount or possible amount of the land damages.

Mr. MIGNAULT. Land values.

Mr. CAMPBELL. I have been treating it as damages, because damages in this case should probably be the real value of the land that we are liable for for injury. In the evidence at Warroad several of the witnesses generally who had improved lands, cultivated lands, put a value on them of $100 per acre. They gave varying prices for the amount that it would take to clear those lands. I am not going to discuss at any length the $100 per acre, because the acreage of cultivated land is very limited. No evidence has been given as to Dominion lands or what were Dominion lands, or Ontario Province lands.

Discussing those in Minnesota, I can pass over the lands that were under the plow, because the total amount of them between contours 1061 and 1064, the total (1) cultivated, and (2) grass lands, as the figures are given in the report of your engineers, are 582 acres; leaving a total of what I will call (3) new or wild land, land which needs clearing to be useful, of 12,403 acres. The acreage and classes of lands is all set, as between various contours, at page — of the engineer's text.

When you come to the wild or new land or unimproved land, unimproved both as to clearing and preparation for the plow and not having buildings on it, the prices of those that had been sold or bought were put by the witnesses at about $10 per acre. From $7.50 per acre some seven or eight years ago, the transactions varied, the highest seems to be up to $15.75.

Mr. MIGNAULT. For wild lands?

Mr. CAMPBELL. For wild or new lands, unimproved.

The average figures given from the public offices and the tax offices for all kinds of lands improved and unimproved would be somewhat lower than this. I do not know whether the lands that were sold were the best and that they were stated to us because they were better than others; but, assuming that the wild or new lands of which evidence has been given were about the average, I would not object to that average as being the fair market value and as having something added to that because the owners are deprived of their use.

Mr. MIGNAULT. You would suggest for wild lands how much?

Mr. CAMPBELL. I think the evidence would show that they run from $10 to $16. There have been one or two sales higher, but there have been some lower than $10; indeed, down to $7 as appears in the evidence.

Mr. TAWNEY. These wild lands would be available for cultivation when cleared?

Mr. CAMPBELL. Yes, sir.

Mr. MIGNAULT. I just want to have you make it a little more precise. What do you mean by "wild lands"? Is it anything outside of cultivated lands, or is it land that has not been cleared—so that there would be three classes at least, wild lands, lands cleared but not under cultivation, and cultivated lands?

Mr. CAMPBELL. I would distinguish them in that way.

Mr. MIGNAULT. You make those three classes?

Mr. CAMPBELL. Yes, sir. But in the figures I have given between those contours, the 582 acres include what Messrs. Meyer and White call cultivated lands. They give the acreage for them and grass lands taken together.

Mr. MIGNAULT. Lands that were never wooded?

Mr. CAMPBELL. They may have been wooded and cleared, and I am not sure but what there are some savannah lands there, or prairie lands along the creeks or rivers. What the natural history of it is I am not sure. Some of those lands needed very little clearing, or if well cleared were adapted for hay.

Mr. MIGNAULT. Then, going a degree higher, what value would you suggest for land not cultivated, but cleared, and grass lands?

Mr. CAMPBELL. I do not know. But I would put it a good deal higher than I would, say, wild lands. There is so little of it that I can be free about it.

Mr. MIGNAULT. Would you consider the cost of clearing the land should come out of it?

Mr. CAMPBELL. That should always come out when you come to wild lands, and the delay during clearing in getting a crop, owing to stumps, and other things.

Mr. MIGNAULT. Take two neighbors, for instance; one owns a wild tract that has not been cleared. The other has cleared off his land but has not put it under cultivation. What would you say as to the relative value of those two farms?

Mr. CAMPBELL. There is not very much difference in them except cost of clearing, leaving out buildings. The virgin soil that the plow had not gone through would be perhaps a little tougher with stumps and roots, or even wild grass roots, but it would be pretty nearly as valuable as the plowed land, I should think.

Mr. GLENN. Why are you confining yourself to 1,062 and 1,064?

Mr. CAMPBELL. One thousand and sixty-one and one thousand and sixty-four.

Mr. GLENN. I thought you said 1,062.

Mr. CAMPBELL. I have the figures also to 1,060. I have not computed them. The engineers' reports show the total acreages at all contours.

Mr. GLENN. I know they do, sir. They take it from 1,057, 1,058, and 1,069; but I was just wondering why you confined yourself to 1,061 and 1,064?

Mr. CAMPBELL. Because I was advancing the argument that 1,060.5 was the mean height of water for June to September, inclusive, that was recognized by the treaty which had existed for 16 consecutive years before the treaty; and I started my computations from 1,061.

Mr. TAWNEY. You mean that 1,061 was ordinary high water?

Mr. CAMPBELL. Ordinary high water since the dam was put in.

Mr. GLENN. That is all I want to know, sir.

Mr. CAMPBELL. Those can be gotten, anyhow, from your engineers' report?

Mr. GLENN. That is all I wanted.

Mr. CAMPBELL. If you take in another foot—that is, the foot between 1,061 down to 1,060—it adds a total of 4,000 acres of wild grass and cultivated lands of which there are, of cultivated and grass lands, 1,012 acres, and wild lands, 16,058 acres in ——, if you take the 4 feet difference of contour. But those figures perhaps had better not confuse the record, because when the commission chooses the contour your own engineers can supply that.

I shall just refer to two of the witnesses as to land values. They are representative.

There was Mr. Carlson, who gave evidence at Warroad at page 83 of the record. He commences at page 81. He has 60 acres cleared and cultivated and 40 more cleared enough to cut the hay. I would not make much difference between the values. I think the witness does make some difference, because I suppose there was some difference in the stumping.

Mr. MIGNAULT. They would be practically the same?

Mr. CAMPBELL. Yes, sir; in a few years they would approximate each other. Perhaps there is some difference.

Mr. GARDNER. Did I understand you correctly to say that you would appraise the cultivated lands at $100 per acre? Was that what was in your mind?

Mr. CAMPBELL. That is what they appraised it at.

Mr. GARDNER. I want to get your idea.

Mr. CAMPBELL. I think they were unanimous in answer to the examination of my friend, Congressman Steenerson. They, with a singular unanimity, placed it at $100 an acre. As I said before, we can afford to be fair-minded about that because the acreage is small, and you are going to put in a lump sum in your memorandum——

Mr. GARDNER. Suppose you are going to make two classes of values to these lands for convenience sake, would you be willing to call the cultivated lands $100 an acre?

Mr. CAMPBELL. From the way the witnesses put it, they put the cultivated at $100 and the other about $50. That is about the way they put it. I think they put them too high. I am frank in saying that. There is no such market value down there. But I intend to refer to one witness, Mr. Holdahl, who was called as an expert, whose highest price was considerably below, namely, $50 to $75 for the best improved lands.

Mr. POWELL. You divide the land into three classes?

Mr. CAMPBELL. Yes, sir; they did that themselves.

Mr. POWELL. You have done it yourself to-day?

Mr. CAMPBELL. Yes, sir.

Mr. POWELL. Cultivated, grass land, and wild land?

Mr. CAMPBELL. Yes, sir.

Mr. POWELL. If you put all outside of the cultivated at $50 an acre, my dear sir, you are running up into the millions.

Mr. CAMPBELL. I am not putting the wild lands at that. The witnesses who mentioned any transactions about that said from about $7.50 to about $16 per acre.

Mr. POWELL. What about the muskeg? That is not land at all?

Mr. CAMPBELL. That is a different class. I will come to that.

Mr. POWELL. If you are making three classes——

Mr. CAMPBELL. There is not very much of that floating bog in the United States. It is the Canadian side that suffers most from that. I take it, Mr. White, that on the American side there is not a large acreage but what you could make fit for some use?

Mr. WHITE. Generally speaking, that is true. There are certain exceptionally large areas in Canada that go to swell the aggregate of that classification for Canada.

Mr. CAMPBELL. I think that the engineers—and I am going altogether on what they say, Mr. Commissioner—are of the opinion that the land itself is of a character, like some of the Canadian land, that even if the water went down several feet it still would be useless. That does not apply, from their report, to so much of the American land.

Mr. POWELL. I understand that if you make a statement that the land should go in at a certain valuation it complicates the situation. Do I understand that the $15, if you take your lowest classification—some as low as $7—that you fix that price on all of the balance of the lands?

Mr. MAGRATH. He is dealing with lands now above 1061.

Mr. CAMPBELL. I can not do much better under this evidence. I do not know that you can get at it fully, because a number of witnesses called spoke representatively for their neighbors, in groups.

Mr. POWELL. You mean lands capable of being made into farms?

Mr. CAMPBELL. Exactly, and generally above contour 1,061. Carlson bought his land for $10 an acre from Mr. Carlquist, a merchant of Warroad. He puts on the upper price. I have forgotten whether it is $75 or $100 per acre.

Mr. TAWNEY. My recollection is it was $60 in 1912.

Mr. CAMPBELL. He then put it at a lower figure—$50 in 1912; but I presume the figures are right here before us.

Mr. MIGNAULT. Page 83. He says:

I do not know whether I would take $75 an acre or not.

Mr. TAWNEY. Was that the last hearing?

Mr. CAMPBELL. That is the last hearing.

Mr. MIGNAULT. The price had gone up.

Mr. CAMPBELL (reading):

If I were to try to sell it I do not know whether I would take $75 an acre or not.

That is at the top of page 83, one-third of the way down.

Mr. MIGNAULT. Of course, I do not suggest that you do not desire to state this fairly, but he gives the reason, that some of the land has cost $35 an acre to clear. He paid a certain price for it; he cleared some of the land, and he adds apparently the cost of clearing to what he has paid for the land.

Mr. CAMPBELL. I was coming to that. There is far more than that in Carlson's evidence.

Mr. MIGNAULT. I know; I just merely wanted to suggest that.

Mr. CAMPBELL. He paid $10, and I presume his answer of about $75 would indicate that he—he does say it is worth fully that, I think, the very next question that Mr. Steenerson asks him. He says some of that land cost him $35 to clear. His buildings put on it cost him $3,000 to $3,500. Cost him, not the preceding owner.

Then we come to Mr. Carlquist's evidence. His testimony begins at page 144. He sold the land that Carlson has, or the Carlson Bros., because I think there were two of them, and he is asked as to what he thinks the Carlson land is now worth. He sold that land for $10 an acre to the Carlsons. Mr. Carlquist is asked:

And now it is worth $6,000?

Mr. CARLQUIST. Yes.

Mr. GLENN. It has increased in value?

Mr. CARLQUIST. Yes.

Mr. GLENN. It has not been very much damaged, then?

Mr. CARLQUIST. Yes, it has; but the parties that got it opened up 80 acres and built good buildings, good granary—one of the finest improved farms in the country. I sold it for the reason that the water raised on it and drowned me out.

Mr. MAGRATH. You sold it to Carlson?

Mr. CARLQUIST. Yes.

Mr. MAGRATH. That is the gentleman who testified here?

Mr. CARLQUIST. I do not know.

Mr. MAGRATH. It is the same man.

Mr. POWELL. And your value of $5,000 includes all the improvements?

Mr. CARLQUIST. I would say from $4,000 to $6,000. It is just my way of putting a valuation on it.

Mr. POWELL. He said his dwelling cost him $3,000.
Mr. CARLQUIST. Maybe it has.
Mr. POWELL. That would be a fair valuation?
Mr. CARLQUIST. Well, I guess so, from the road; I really do not know what he wants for it.
Mr. POWELL. There are good outside buildings on it?
Mr. CARLQUIST. Yes; he has good buildings on it.

This was a farm sold for $1,600, and since the sale there is erected a $3,000 house and other buildings, and 80 acres at least cleared and broken up ready for cultivation. That value in September, 1915, deducting improvements, takes us back to $10 for wild land.

There is no evidence at all that would show that wild land generally anywhere in that neighborhood near the lake shore, nor farther back in Roseau County, is worth more, close to a town, than from $12 to $15 an acre; some of it is much less. The State lands have a valuation or a selling price of not less than $5 per acre, and they have sold, other witnesses have pointed out, for $7 upward, I suppose according to the situation—the dryness and the closeness to the village.

Then Mr. Holdahl was called by counsel for the United States. He qualified as an expert witness on real estate values, having been engaged in that business at the county seat of Roseau County. He says, in answer to Mr. Wyvell's question:

What, in your judgment, is a farm of 160 acres, with appropriate buildings, in the section where you reside worth?
Mr. HOLDAHL. There are farms tributary to Roseau, with good buildings on them, that you could not buy for less than $75 an acre.
Mr. WYVELL. What range of prices would you state?
Mr. HOLDAHL. Improved farms, with reasonably good buildings, and cleared, are worth all the way from $50 to $75 an acre.
Mr. WYVELL. What would be the value of such land in units of about 160 acres, without any buildings?
Mr. HOLDAHL. That is, land cleared of brush?
Mr. WYVELL. Land either partly in hay or under the plow.
Mr. HOLDAHL. It depends a little on the distance from town, but all the way from $15 to $35 an acre.

That is wild land, land cleared of brush, land either partly in hay or under the plow, land without buildings.

Mr. MIGNAULT. I put him the question immediately:

That is cleared land?

Mr. CAMPBELL. Yes, sir; I had not got down there. [Reading:]

Mr. MIGNAULT. That is cleared land?
Mr. HOLDAHL. Yes; partly cleared from brush and timber.
Mr. WYVELL. Do you feel that you can speak accurately of land values from the lake back 2 or 3 miles?
Mr. HOLDAHL. Up around here?
Mr. WYVELL. Around here.
Mr. HOLDAHL. No; I could not. So far as the soil is concerned, what I have seen is similar to the soil we have.

He qualified as a witness to give evidence of values near the county seat of the county in which Warroad and most of that lake shore is situated, but he could not speak definitely about lands near the lake shore. But his evidence is most important.

There is a report that I ought not to overlook. It is filed as an exhibit—the report of Mr. Wolff, sanitary engineer, of St. Paul, the capital of the State of Minnesota.

Mr. POWELL. As to Warroad?

Mr. CAMPBELL. As to Warroad.

The effect of it is, I think, that they would have to install a pumping plant for their sewage in any case, even at what he refers to as natural levels, 1,053 to 1,057. But the burden of the report is to estimate the increased cost of the pumping. He concludes that the increased cost per annum of the pumping would be $600 for four pumps. Only one has so far been installed. But increase of population will need more. So that that becomes a matter of capitalizing that cost at 6 per cent, or, say, a capital sum of $10,000 to the town of Warroad.

I will not take up any more time with the larger questions. They are questions for your own consideration and the gentlemen representing the Government to put the best methods forward to ascertain these land values and as to how far the law of eminent domain will apply. Not being well acquainted with the Constitution of the United States, I might be able to talk quite a while about it, but I have formed the opinion that no treaty can be made that will subvert or infringe the Constitution, but that the Constitution itself provides that treaties when made stand above the ordinary legislative power of Congress. In other words, the President and the Senate, when they deal with international arrangements with foreign countries, can provide a law that shall be supreme throughout the Union and that might override the will of Congress itself.

I need not go into that. I think it has been put in one or two decisions where the treaty-making power has been discussed as long as they require no State to cede territory and do not subvert the provisions of the Constitution, the treaty-making power is complete. That, however, is a matter that I will not further press nor continue with.

It may be that I might like, as Mr. Rockwood, to crave the indulgence of the commission to put in some authorities on some one or two matters, but, excepting one, I shall not trouble you with legal citations further.

Merely as illustrative, not to show that there has been a right of prescription, but to show how this treaty could and should be read as protecting rights by analogy to the domestic law I cite one case from the reports of the State of Minnesota, a case reported in 65 Minnesota Reports, page 500; also reported in 67 Northwestern Reporter, page 1022.

Mr. POWELL. What is the point of that case?

Mr. CAMPBELL. The head note, or the syllabus prepared by the court, reads as follows:

> A wrongful entry upon land under a claim of right, inconsistent with the title of the true owner, with continued possession, and the exercise of acts of ownership hostile to the rights of the owner and without any pretense of paper title, may ripen into title by prescription.

Authority is cited for that. The Village of Glencoe *v.* Wadsworth (51 N. W., 377; 48 Minn., 402):

> This rule applies to an easement in real property. And where the claimant needs the use of the property from time to time and so uses it, this is a sufficiently continuous use to be adverse, although it is not constant. Rule applied in this case and held that the building of a dam across Snake River, and the continued adverse use of the dam, whereby the water of the river was obstructed and thereby overflowed plaintiffs' land during the months of

April, May, and June in each year, for the purpose of sluicing logs, for a period of 15 years, was sufficient to create an easement in plaintiffs' premises during the said three months in each year.

Mr. POWELL. What does he mean by prescription? Is there a period fixed by statute?

Mr. CAMPBELL. The ordinary statute of limitations.

Mr. POWELL. That is, 15 years?

Mr. CAMPBELL. Fifteen years; and then prescription follows that.

Mr. MIGNAULT. Does the court state the period to be 15 years?

Mr. CAMPBELL. Yes, sir.

Mr. MIGNAULT. It is very familiar to me, because we have prescription under our law in Quebec, but the period varies from 10 to 30 years. But a prescriptive title is as good as any other title when it is acquired.

Mr. CAMPBELL. The question came up to the courts, but lawyers differed as to the adverse use or possession being continuous. All lawyers are familiar with the effect of continuous possession during the whole 12 months, or a certain portion of 12 months, but this point apparently was new, then.

Mr. Laird hands me a memorandum of authorities on the interpretation of treaties and of statutes taken from both American and English authorities and American and English judges. It may be that as the hearing proceeds we might ask for leave to print, or "extend and print." I believe, is the right term, Mr. Tawney?

Mr. TAWNEY. Extend your remarks in the record?

Mr. CAMPBELL. Yes, sir.

Mr. TAWNEY. I would suggest that you file it with the secretary.

Mr. CAMPBELL. I had brought it in with the intention of putting it before you or to have it so as to supplement what Government counsel might say on the same thing. It is not ready now. I would not put all this in in any case.

Mr. MIGNAULT. You have not prepared a brief, have you, as Mr. Rockwood has?

Mr. CAMPBELL. No, sir; my notes are all scattered here.

Mr. POWELL. If you have a spare copy, I would like to have a copy of it. I do not see the bearing on this case, but it may have a bearing on the other.

Mr. CAMPBELL. I think I have nothing more to offer to the commission.

Mr. CAMPBELL. There are yet to be heard for the Manitoba interests Mr. Laird for the Winnipeg Electric Railway Co., Mr. Wilson for the Lake of the Woods Milling Co., and Mr. Hudson, the attorney general of Manitoba.

I have to thank the commission for unvarying courtesy and kindness throughout these hearings. Probably this will be my last appearance before the commission.

Mr. MIGNAULT. We hope not.

Mr. CAMPBELL. I also hope not, Mr. Commissioner. But that good fortune is for younger men. And closing now causes me some emotion. I first appeared before the commission four years ago. I then thought as a student—not a profound but an earnest one—of the history of our two countries, that its establishment was an event long to be remembered. Since then your court of six judges—not three for each nation but six for both—in a variety of cases all the way from

the waters rising in the foothills of the Rockies to the Atlantic shores has well and amply illustrated the principle and the spirit embodied in the great treaty of 1909.

The United States and Great Britain have had a century of peace not because of inert or sluggish patriotism, for on several occasions there were controversies keen and angry which threatened a menace to peace, but the statesmen of the two countries were great enough and strong enough to come together, thrash out the disputed issues, and settle them. We have had a hundred years of increasing friendship and good will, and perhaps some historian of your country or of mine, Mr. Chairman, may yet write the history of a millennium of peace. And if his work be at all comprehensive he can not fail to note that in our twentieth century there was established your International Joint Commission.

Mr. GARDNER. I am very sure, Mr. Campbell, that I express the mind of the entire membership of the commission when I say that we have been always, and I apprehend will be in the future, very glad to have your appearance before the commission on any matter in which you may be interested.

Now, Mr. Laird, we have half an hour left before taking a recess, and shall be glad to have you occupy that time.

ARGUMENT OF MR. D. H. LAIRD.

Mr. LAIRD. Mr. Chairman and gentlemen of the commission, I represent, as you are aware, the Winnipeg Electric Railway Co. Its plant is farther downstream on the Winnipeg River than that of the city of Winnipeg. I also represent the Winnipeg River Power Co., which is contemplating the erection of a plant about 40 miles farther downstream than the present plant of the Electric Railway Co.

In all respects the position of my clients regarding the present plant, which is known as the Pinawa plant, is substantially the same as that of the city of Winnipeg. I do not intend to take up your time in going over either the facts or the matters of construction or of law which Mr. Campbell has dealt with, but I will adopt and ask you to apply to the Pinawa plant all that Mr. Campbell has said.

As to the electrical needs of Winnipeg and surrounding districts, I would also ask you to adopt what Mr. Rockwood has said. Mr. Rockwood's site at the outlet of the lake is not as near Winnipeg as the plants of the city of Winnipeg and the Winnipeg Electric Railway Co., but whatever the future may be at Kenora, I do not think there is any question but that the future of the electrical development in the prairie Provinces and the country that is tributary to Winnipeg is very great. This power on the Winnipeg River is practically the only available power for that district. The development that we have had, as indicated by Mr. Campbell, has been very, very great. My clients were the pioneers in this work in the west. They commenced the work on the Pinawa plant in 1903. They brought the current over the wires in 1906, and since then the demand has been increasing.

Under present conditions I do not think that any recommendation which the commission can make will assist very much the plant of

the company at the Pinawa Channel. That is the evidence in the record of Mr. Lea, our consulting engineer, and in that respect we are in the same position as the city of Winnipeg. At the present time, with the plant we have there, there is nothing further that we can ask for. What regulation there has been at the outlet has been beneficial to my clients. There have been times when it has been necessary for us to go to the representatives of the Ontario government and ask for more water to come down; but there is no doubt that, as the engineers report, that regulation there has been of benefit.

There is one point in which my clients differ from those of Mr. Campbell. Mr. Campbell represents the city corporation while I represent a private corporation, but in this matter the difference is more superficial than real. We both are serving the needs of the same community, and we both are serving the needs of the public. The people who have reaped the benefit of this hydroelectric power and who will reap it in the future are not the shareholders of my client company, but the citizens of the city and the outside districts. We differ from the city in this, too: We supply current to outside municipalities and, except to a small extent, my learned friend's clients do not. I refer especially to the municipality of Kildonan.

Now, there is the other aspect of it. We are under the control of the public utilities commission, and, being in competition with the city for the supply of light and power, the rates are necessarily kept down to the minimum; and, further, there is the control exercised by the public utilities commission as to the rates we may charge.

There is the other branch of our business, the electric railway branch. I am not going to trouble you to go over the evidence put in at Winnipeg as to the development and the use of electricity for that purpose, but it is a large part of our business, and all the electric railways in the city of Winnipeg and in the surrounding districts, to an extent of probably 22 miles in one direction, 13 miles in another, and 9 in still another, are served by and use this electricity. And that service is only commenced. We have pressing demands for the extension of those lines, and that is a public service, too. So in asking for a greater supply of water power and greater regularity of flow we are asking for it not for the purpose of our shareholders but for the purpose of serving the community. As it is at present, the company has the Pinawa plant. It has also two steam plants in the city of Winnipeg, and those and the Pinawa plant, while operating to the utmost capacity, are not sufficient to fulfill the needs of the company and the needs of its customers. A company was formed, subsidiary to the Winnipeg Electric Railway Co., some years ago, and that company, namely, the Winnipeg River Power Co., has acquired the site 40 miles farther downstream, known as the Great Falls site. The plans have been completed and we are ready to proceed with that work. It is because of waiting for an improvement in financial conditions and conditions generally in the West that the matter is delayed, but we need that power now to do away with the operation of the steam plant.

The increased range in the waters of the Lake of the Woods will very materially affect that new plant and will mean a great difference in the commercial feasibility of the scheme. As to that, I would simply refer to the evidence of Mr. Lea upon the subject, especially

that portion of his testimony appearing on pages 402 and 432 of the record. The needs are growing, not only in the development and the growth of population in the city of Winnipeg and the surrounding district, but the needs are increasing and developing in the uses to which electricity can be put. The uses are developing rapidly, and we have this double development which accounts for the very large, almost astounding, figures that Mr. Campbell has given as to what has taken place in the past and as to what will probably take place in the future.

I do not propose to go over the treaty or over the reference. I take it that the purpose of the reference is to improve present conditions, and that the commission and the citizens of both countries are asked to look at the matter in the broadest possible light and for the purpose of ascertaining the most advantageous use of the waters and the shores and borders of the lake. As representing the power interests I submit that the most advantageous use of those waters can only be accomplished by a consideration of the power interests. At the same time, I do not think there is any conclusion to be reached other than that the use of those waters must be consistent with the protection of the rights of other parties, and I take it that the reference was made for that purpose. I do not think that if the Governments of both countries had meant that conditions were not to be improved or not to be changed that we would have had this reference, but I read the reference as meaning that it was the desire to improve and better the conditions.

We built our plant when the Norman dam was there. It was the only thing we could do. We have operated under those conditions, and the only improvement that the commission can make will be, with respect to the Pinawa Channel, to insure us a more uniform flow all the year around, and that more uniform flow will very materially assist in the plant farther downstream.

Mr. GARDNER. Is it because of a lack of development in that channel that you have to maintain your steam plant? It is because of a shortage of water?

Mr. LAIRD. No; because the Pinawa plant can not develop any more than it is developing. It is developing to the fullest capacity. One of the steam plants was built since 1906 when it was not thought that the needs would be such as to require a further development of the hydroelectric plant, but some years ago it was seen that it was utterly impossible to keep pace with the needs and the demands of the public without a further hydroelectric plant. For that purpose this Great Falls site has been acquired and a large sum of money has been spent. The expenditure that has been made is referred to in Mr. Hartwell's testimony on page 383 of the record. There has been a steam railway 13 miles in length built for the purpose of taking in the material, machinery, and supplies. At present that is at a standstill.

Mr. GARDNER. That is farther downstream?

Mr. LAIRD. That is farther downstream. By the river it is about 40 miles below our present plant. The plants of both companies are farther downstream than that of the city of Winnipeg. We are nearer Winnipeg because the river turns in a westerly direction after it leaves the city's plant.

My learned friend Mr. Campbell mentioned some cases that he wished me to refer to. As to the expression "normal" my construction of the reference is that it means the usual, the normal or natural—that is, the usual or ordinary level of the lake—and I can see absolutely no advantage, from the point of view of considering the rights of these parties, in going into the question of what was the level of that lake in a state of nature 30 years ago. The treaty, as I take it, and as the recital and opening paragraph of the proclamation especially indicates, surely was meant to settle all matters in dispute between the countries and to ratify and confirm everything that had been done in boundary waters or in waters flowing from them up to that time. It also went further and constituted this commission for the purpose of preventing such disputes in the future. But I can not read the language of the treaty as meaning anything else than that the conditions then existing are ratified and confirmed, and that no disputes can arise as to them.

Mr. TAWNEY. Is it not true, Mr. Laird, that, in so far as the effect of the construction of the Norman Dam upon the rights of the people on this side of the line are concerned, there was at the time this treaty was made a dispute growing out of that fact, and that therefore this was one of the existing disputes at the time the treaty was made for the settlement of which the treaty was intended to make provision?

Mr. LAIRD. It made provision by giving the citizens on your side of the line and on our side of the line the right to claim compensation or bring an action in the courts in the other country, but the clause giving that right—clause 2—expressly provides that it does not apply to past matters.

Mr. TAWNEY. That is under article 2.

Mr. MIGNAULT. That is a rule for the future.

Mr. TAWNEY. But the two countries recognized the fact that there were disputes between them, and it was for the purpose of settling those disputes and preventing future disputes that they made this treaty.

Mr. LAIRD. But I take it that this commission is prohibited from interfering with existing conditions. They are only to deal with future conditions and the future uses of these waters.

Mr. TAWNEY. Under article 9 we do not interfere with any conditions; we are simply to report to the two Governments on specific questions which they have referred to us for that purpose. It is for the two Governments to afterwards decide what shall be done under article 9.

Mr. GLENN. You do not mean to say, do you, Mr. Laird, that we can not go back beyond the time the thing was referred to us?

Mr. LAIRD. I mean that the treaty ratified existing conditions and that this commission has not the power to change those conditions unless it is expressly authorized in the treaty.

Mr. GLENN. Was not this very condition brought about and this matter referred to us because of the fact that the farmers on the other side were complaining that by putting that dam there you had increased the water so much that you were ruining their land, and, therefore, they wanted the matter settled by a treaty?

Mr. LAIRD. But the complaints here are from both sides.

Mr. GLENN. I am talking about the farmers on both sides. They complained that you were damaging their land there by putting in a dam. Was not that the very cause of this reference to us?

Mr. LAIRD. That was one of the causes.

Mr. GLENN. Then would not that go there for the purpose of comparing what was the condition prior to the construction of the dam and the present condition, so as to see what would be the proper way to compensate the people who were damaged by it?

Mr. LAIRD. No; I submit not. Keeping in mind what Commissioner Tawney has said, that this is not under any article of the treaty which gives the commission original jurisdiction, yet under the clauses of the treaty giving you original jurisdiction you are not only not empowered to alter existing conditions, but you are told that your powers are limited, that you are not to interfere with existing conditions.

Mr. GLENN. So you do not think we can go back and consider conditions prior to the building of that dam?

Mr. LAIRD. In this reference you can, and I believe that one of the reasons such a reference was made rather than an application was that you could consider these matters of prior history and recommend what you thought best under the circumstances.

Mr. GLENN. According to your view, then, we would not take into consideration damages that had accrued up to the time that this thing was referred to us, but we should confine ourselves to what might happen in the future?

Mr. LAIRD. With regard to the question of submergence and the question of future damages, when you take a man's land and compensate him for it, that is the end of the damage.

Mr. GLENN. I would like to hear you a little further on that point, because my mind does not agree with you in that respect.

Mr. LAIRD. I submit that that is the interpretation of the treaty. What Mr. Tawney says as to this being a reference and the commission being required to go further and not being limited by the treaty, is a matter of interpretation of that section and of the intentions and purposes of the Governments, but I take it that we must assume that in acting under article 9 the Governments of both countries are governed by the treaty, and that they do not wish you to recommend anything inconsistent with the treaty. Of course, it is quite feasible to make a new treaty, and, if necessary, this commission could recommend such a thing, but the presumption is that that treaty is a law of both countries, and any action must be along the lines indicated in the treaty. It does not apply merely to this Norman Dam. I take it that there are hundreds of obstructions in the international waters and in waters flowing out of international waters, and it would be utterly inconsistent with all the principles of jurisprudence, both in this country and in our country, that the two countries could come in and make a treaty and destroy all those past uses and conditions and say to the private parties who had spent millions of money in their investments and built them up under those conditions that all that must be changed. Some other means is to be found rather than that, and I take it, as I indicated before, that one of the purposes here was to evolve some such means.

Mr. GARDNER. Yes; but they require the commission to ascertain what the natural level of the lake was.

Mr. LAIRD. Well, natural in that sense, the normal.

Mr. GARDNER. Then the undisturbed conditions in a state of nature.

Mr. LAIRD. I submit not, with deference to you, Mr. Chairman. The first word is "normal." It is normal or natural. Both words have the meaning of "the usual" and "the ordinary," and all of the other articles of the treaty indicate that present conditions are conserved.

Mr. GLENN. Did not the building of that dam make it unnatural?

Mr. LAIRD. Yes; it changed the state of nature, but since the building of that dam in 1888 other conditions have arisen, and those are the normal conditions existing since that time. The present conditions are the usual, ordinary, common conditions that have existed all these years.

Mr. GLENN. But what conditions have arisen since the building of that dam that did not exist prior to it in a state of nature?

Mr. LAIRD. Take my client. We have built a plant costing upward of $3,000,000 down the river with the dam existing there. We had no other alternative. We could not ask that that dam be removed. It was in another province, put in by the Dominion Government, and to say now that this commission, under the language of the treaty, has authority to alter those conditions would require the very strongest language, and language which is not found in it at all. On the other hand, we do find language which indicates that existing uses are not to be disturbed. But all I have said does not affect the question very much, because——

Mr. GARDNER. Your plant is not affected in any way by the lake level as long as you get your supply of water?

Mr. LAIRD. Exactly.

Mr. POWELL. Mr. Laird, my brother commissioner, Mr. Tawney, did not think article 2 applied, and my opinion is at present that Mr. Tawney is absolutely correct. I intended to mention the matter to Mr. Campbell before he got through his argument and forgot it. If you will follow closely the wording of article 2, you will see that it does not touch this case at all.

Mr. CAMPBELL. It does not; there is no doubt about it.

Mr. POWELL. It touches cases like the St. Mary River, the Milk River, the Red River, and the Roseau River. Article 2 says:

> Each of the high contracting parties reserves to itself or to the several State governments on the one side and the Dominion or provincial governments on the other, as the case may be, subject to any treaty provisions now existing with respect thereto, the exclusive jurisdiction and control over the use and diversion, whether temporary or permanent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters.

Now, that is not the Lake of the Woods. It continues:

> But it is agreed that any interference with or diversion from their natural channel of such waters on either side of the boundary, resulting in any injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs; but this provision shall not apply to cases already existing.

What cases? Cases where the waters flow across the boundary line. To my mind it has no more to do with the Lake of the Woods than the man in the moon.

Mr. LAIRD. Your construction would be that that had no application to the Norman Dam?

Mr. POWELL. It is not a question that involves the Lake of the Woods at all.

Mr. LAIRD. The Lake of the Woods, I take it, is a boundary water.

Mr. POWELL. That is true, but you see this deals with the right to divert waters exclusively within the territory, we will say, of the United States. They can do what they like with them. They can take a new channel and make any use of it they see fit, and the Canadian lower riparian proprietor can not complain of the matter, if it is after the passage of the treaty, except in this way: He can go into the United States courts and get the United States to assess him damages. Now, those are the cases that this article of the treaty is dealing with.

Mr. LAIRD. Commissioner Powell, you limited the article much more than I did. You limited the expression "such waters"——

Mr. POWELL. Such waters flowing across the boundary alone, exclusive from other territory.

Mr. LAIRD. I had not so limited it; and, subject to further consideration, my interpretation of the expression "such waters" was to apply it to boundary waters on the principle that that expression refers to the last-mentioned waters. That is a well-known rule of interpretation under our English law.

Mr. POWELL. That is too technical.

Mr. LAIRD. I am very glad to adopt your construction, but mine protects the citizens of both countries and gives them very much greater protection than yours does, and I submit that the treaty is to be read in the most liberal manner.

Mr. POWELL. Yes; but you can not make a new treaty.

Mr. LAIRD. No; but limiting such waters to the waters that flow across——

Mr. POWELL (interrupting). But those are the waters that we are to deal with and none other.

Mr. MIGNAULT. You might suggest that these waters do flow across the boundary. They go down the Rainy River, across the Lake of the Woods, and down the Winnipeg River.

Mr. POWELL. If you will look at article 2 you will find that it does not refer to boundary waters, but to waters flowing across or into boundary waters. That article says:

> Of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters.

Mr. MIGNAULT. If they flow across the boundary they are within article 2.

Mr. POWELL. That is in the case of the Red River. They are not boundary waters themselves. Boundary water does not flow across the boundary. Boundary water is there and the boundary is through it.

Mr. MIGNAULT. But there are two classes here; one class is waters that either flow across the boundary or flow into boundary waters.

Mr. POWELL. Or into boundary waters, but that does not mean boundary waters themselves.

Mr. MIGNAULT. If they flow into boundary waters, any obstruction in them may affect the boundary waters.

Mr. POWELL. It would means this, that the United States or Canada could go to work and divert all it pleased of the boundary waters and say: "Go into the courts and get your remedy." The whole object of the treaty, which says that no diversion shall take place without the consent of this commission, becomes null and void and incapable of any enforcement, because there is nothing to which to apply it.

Mr. LAIRD. The article does not directly come up for any interpretation now.

Mr. POWELL. Mr. Campbell was citing it and urging it as something in support of his construction.

Mr. CAMPBELL. I beg your pardon, as illustrative of the spirit of the treaty and as showing that when we read a treaty with all its clauses, making them consonant with one another, then the spirit of article 2 helps us to interpret articles 3, 4, and 8.

Mr. GARDNER. It is now half past 5 and we will suspend for the day. We will take a recess until 10 o'clock to-morrow morning.

WEDNESDAY, APRIL 5, 1916.

The commission met at 10 o'clock a. m., all the members being present, Mr. Gardner presiding.

Mr. GARDNER. Mr. Laird, are you ready to go on now?

Mr. LAIRD. Yes, Mr. Chairman. I have a few further points I wish to direct your attention to very briefly.

First, as to the treaty and the reference: My submission to the commission is that the treaty and reference be read together, and that in the reference under article 9 the principles upon which the commission should act are set forth in the other articles of the treaty. There are some authorities upon this point that I wish to refer to very briefly.

First is the case of the United States *v.* Texas, which is reported in volume 162 of the United States Reports, commencing at page 1. On page 36 it says:

> Undoubtedly, the intention of the two Governments, as gathered from the words of the treaty, must control; and the entire instrument must be examined, in order that the real intention of the contracting parties may be ascertained.

Kent's Commentaries are cited in that judgment as authority for that proposition.

Mr. MIGNAULT. That case merely says that the intention governs where it can be ascertained.

Mr. LAIRD. Yes; but there is the further point that we must read the entire treaty.

Mr. MIGNAULT. Well, that is a familar rule of construction, not to isolate any part, but to read the whole.

Mr. LAIRD. Then, there are some textbooks on international law to which reference might be made—for example, Hall on International Law, sixth edition, page 327, where it is said:

> When the language of a treaty, taken in the ordinary meaning of the words, yields a plain and reasonable sense, it must be taken as intended to be read in that sense, subject to the qualifications that any words which may have a customary meaning in the treaties differing from their common signification must be understood to have that meaning, and that sense can not be adopted which leads to an absurdity or to incompatibility of the contract with an accepted fundamental principle of law.

Mr. TAWNEY. Mr. Laird, the treaty considered by the Supreme Court of the United States in the case of The United States *v.* Texas dealt only with one subject, namely, the boundary between Texas and the United States. The treaty was with Spain. Does the same rule apply in the interpretation of a treaty that deals independently with a number of different situations and subjects? For example, take article 6 of this treaty, which deals exclusively with one subject. In the interpretation of article 6, outside of whatever effect may be given to the preamble of the treaty, is there any other article in that treaty that should be considered in construing article 6 as to what the intention of the high contracting parties was?

Mr. LAIRD. I submit so. I appreciate the point Mr. Tawney has in mind—that article 9 might be embodied in a separate treaty.

Mr. TAWNEY. The same is true with respect to article 3 and article 4. They all deal with independent propositions. None of them is dependent upon the others. If the different articles were dependent upon one another, the rule contended for, I admit, is right; but where the articles are entirely interdependent the same rule, I do not think, necessarily follows.

Mr. LAIRD. I submit that it does, especially where the language employed in the various articles is so much alike. As Mr. Campbell pointed out yesterday, the language in article 3 is "heretofore permitted." In article 4 we have the words "permit the construction or maintenance." In article 8 there is a reference to "existing uses." Article 9, the article under which this reference is made, is wider, of course, than the other articles, but I think in considering article 9 we must consider the entire treaty and the language used in other articles. And there is the further point that the treaty is the supreme law of both countries. I contend that it would be quite futile for both countries to ask this commission to report on a matter and to act in a matter inconsistent with the law of those countries. That is, we must assume, I take it, that both countries are being governed by this treaty, and what they want to do is to work out the provisions of the treaty; and because it was impossible to cover in the express articles of agreement all the points that might arise they made this provision in article 9 for such reference. Then, on the recommendation of this commission, a new agreement could be made. I have not been able to find any treaty the same as this in the respect that one article dealt with one subject and another with another subject that has been interpreted.

Mr. TAWNEY. The articles in most all treaties are interdependent. They are not independent of one another. That is a peculiarity of this treaty.

Mr. LAIRD. I think perhaps it is peculiar, but I do not think it is the only one by any means; but I have not found any treaty that has been interpreted by the courts or the text writers where there was such a wide difference of subjects covered. I think in the treaties ordinarily they bring in all matters which are the subject of dispute between the countries.

I would refer further to the language used by Hall on page 330, where he says:

> When the words of a treaty fail to yield a plain and reasonable sense they should be interpreted in such one of the following ways as may be appropriate:
> (*a*) By recourse to the general sense and spirit of the treaty as shown by

the context of the incomplete, improper, ambiguous, or obscure passages, or by the provisions of the instrument as a whole. This is so far an exclusive, or rather a controlling method, that if the result afforded by it is incompatible with that obtained by any other means except proof of the intention of the parties, such other means must necessarily be discarded; there being so strong a presumption that the provisions of a treaty are intended to be harmonious; that nothing short of clear proof of intention can justify any inerpretation of a single provision which brings it into collision with the undoubted intention of the remainder.

(*b*) By taking a reasonable instead of the literal sense of the word when the two senses do not agree.

Whenever, or in so far as, a State does not contract itself out of its fundamental legal rights by express language a treaty must be so construed as to give effect to those rights. Thus, for example, no treaty can be taken to restrict by implication the exercise of rights of sovereignty or property or self-preservation. Any restriction of such rights must be effected in a clear and distinct manner.

My application of that rule to the present circumstances would be as to the Norman Dam. There is no doubt, I take it, that under international law the Canadian Government had the power to put in that dam. Of course, here we have more than the mere action by one of the countries putting it in; we have the correspondence between the two countries, and the fact that it was put in for purposes of navigation in an international water. That was the primary purpose. But unless there is express language in the treaty affecting that dam the rights of the Canadian people and the rights of my clients who have built their works and spent millions in money in the development of the water power when that dam was there should not be affected in any way—that is, not only in the matter of compensation, but in the matter of alteration.

Mr. POWELL. Would you say, Mr. Laird, that inasmuch as Canada is the sovereign power on the northern side of the international boundary that it has the right to back up water upon United States territory?

Mr. LAIRD. I think under international law that was the position.

Mr. MIGNAULT. I would not rest my case on that.

Mr. LAIRD. Certainly not.

Mr. POWELL. That is necessarily connected with the dam. If in putting in the dam you raised the water, you would find the water up on the soil.

Mr. LAIRD. The dam was put in, as I take it, for purposes of navigation for both countries.

Mr. POWELL. I do not care for what purpose it was put in. The United States has its way in the matter. Canada has no right to dictate to the United States.

Mr. LAIRD. No; not at all, but Canada has the control of the waters within its own territory.

Mr. POWELL. But do you go so far as to say that it has control of the water to the extent that it has a right to raise the water and flood territory in the United States?

Mr. LAIRD. No; I do not need to go that far.

Mr. POWELL. I think you are going too far if you raise the dam.

Mr. MIGNAULT. Mr. Laird, is it not sufficient to say this, that both the United States and Canada have recognized that whatever might have been the rights as to constructing this dam, some compensation must be made for the damage or for the overflowing of lands which

ensued as a consequence of the backing up of the water by reason of the construction of the dam? If I were in your place, I would not rest my case on the principle of international law. I think that, in the first place, we are governed by the terms of the treaty. In the second place, we are asked to value lands which were submerged at a level which we will assume to be higher than the normal or natural level, and this to my mind would exclude any question of whether or not in constructing the dam or authorizing the dam to be constructed the countries exercised purely and simply a right which they could exercise without regard to the damage which the construction of the dam might cause.

Mr. LAIRD. Well, Commissioner Mignault, I must dissent from your suggestion to value the lands submerged by the construction of that dam. This commission, under the reference, is only asked to ascertain the value of the lands submerged if the level that the commission recommends is higher than the normal level.

Mr. MIGNAULT. Of course; but, at the same time, if the commission were to recommend, by reason of the construction of these dams, a level that is higher than the normal or natural level, then we are asked to value the lands which would be submerged.

Mr. LAIRD. I do not know that I can make it any plainer. Unless the commission raises the normal level, the question of valuing lands does not arise. The commission has no jurisdiction to consider it at all. The first question says:

> In order to secure the most advantageous use of the waters of the Lake of the Woods and of the waters flowing into and from that lake on each side of the boundary for domestic and sanitary purposes, for navigation and transportation purposes, and for fishing purposes, and for power and irrigation purposes, and also in order to secure the most advantageous use of the shores and harbors of the lake and of the waters flowing into and from the lake, is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and if so, at what level?

The second question says:

> If a certain stated level is recommended in answer to question 1, and if such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake, when maintained at such level, overflow the lowlands upon its southern border, or elsewhere on its border, and what is the value of the lands which would be submerged?

Now, it is only in case the level recommended by this commission is higher than the normal level of the lake that the question of the value of the lands arises at all, and if this commission should take a view that they can not recommend any stated level higher than the normal level, the answer to question 1 terminates the matter.

Mr. MIGNAULT. But the construction of this dam, let us assume, has raised the level above the normal or natural level. If that be the case, and the commission recommends that this level should be maintained, then we are asked to value the lands, are we not?

Mr. LAIRD. I submit not.

Mr. MIGNAULT. I should like to hear you on that point.

Mr. LAIRD. You and I may differ as to the construction of those words "normal or natural," and that may be the explanation of our difference.

Mr. MIGNAULT. The point of my observation is this: It is immaterial whether, in constructing this dam, or in authorizing the con-

struction of it, Canada exercised a right which it could exercise without regard to the damage which might be caused, because the only question we have to consider is whether it was advisable to raise the level of the Lake of the Woods higher than the normal or natural level; and if so, we are asked to value the lands that would be submerged. That is the only question we have to consider. The other questions may be interesting, but I think they are irrelevant. I would not wish to pronounce on them.

Mr. LAIRD. That is my feeling in the matter. I did not wish in what I referred to as international law, as suggested by Mr. Powell, to rely upon that; but it was simply as introductory to the consideration of the treaty.

I wish also to invite attention to the language used by Wheaton in his textbook on International Law, on page 345, which as as follows:

In interpreting any expressions in a treaty regard must be had to the context and spirit of the whole treaty.

The interpretation should be drawn from the connection and relation of the different parts.

The interpretation should be suitable to the reason of the treaty.

Treaties are to be interpreted in a favorable rather than an odious sense.

Whatever interpretation tends to change the existing state of things at the time the treaty was made is to be ranked in the class of odious things.

I quote also from pages 94, 95, and 97 of Phillimore's International Law, volume 2, second edition, as follows:

There are certain general rules of literal interpretation, as follows:

The principle rule, viz., to follow the ordinary and usual acceptation, the plain and obvious meaning of the language employed.

The construction is to be derived from a due consideration of the language in the whole instrument and not from that of particular portions or sentences.

The further rule of deriving the interpretation of a particular passage from a comparison with the whole context of the instrument, and which mode of intepretation belongs as much to the logical as to the grammatical division of the subject.

I refer, too, to the American work, Cyc., mentioned by Mr. Campbell yesterday, volume 38, the article on treaties. At page 970 the same principle is laid down:

A treaty should be construed as a whole, and in the light of circumstances, and conditions existing at the time it was entered into, the objects that the parties were desirous of effecting, and their legislation upon the subject; and if practicable it should be construed so as to give a reasonable and sensible meaning to all of its provisions, and so that it may have its effect, and not prove vain or nugatory.

Then there is an English case which I might refer to. It is The Queen *v.* Wilson, reported in the English Law Reports, Queen's Bench Division, 1877, at page 42. There was a treaty between the United Kingdom of Great Britain and the Swiss Confederation. The treaty provided that each of the contracting parties should deliver to the other the persons who, being accused or convicted of a crime committed in the territory of the one party, should be found within the territory of the other party under the circumstances and conditions stated in the treaty. Article 3 of the treaty provided that no Swiss should be delivered up by Switzerland to the Government of the United Kingdom, and no subject of the United Kingdom should be delivered up by the Government thereof to Switzerland. That is, the treaty did not apply with respect to citizens of either country.

The English extradition act, chapter 52, of 1870, section 2, provided that—

> Where an arrangement has been made with any foreign State with respect to the surrender to such State of any fugitive criminals, Her Majesty may by order in council direct that this act shall apply in the case of such foreign State.

A case arose in which the magistrate held that all he had to do was to look at the English extradition act and the facts. The accused happened to be a British subject, and the crime was committed in Switzerland, and it was claimed that the treaty protected him, but the magistrate refused to adopt that view and said he was acting under the extradition act. It went to the court and the court decided that the treaty and the extradition act must be read together, and, although the judges unanimously regretted the result, they said the act could not affect the treaty and the rights under the treaty. The case is somewhat akin to what we have here. We submit that the reference, under article 9, is subject to and is to be read along with the other provisions of the treaty.

Perhaps I am going too far afield in referring to these other cases. Your commission recalls the reference upon the pollution of international streams where, I take it, the governments of both countries indicated that it was their interpretation of the treaty that references under article 9 should be read along with the other provisions of the treaty. Article 4 of the treaty contains the following clause as to the pollution of boundary waters:

> It is further agreed that the waters defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.

The definition of boundary waters under the treaty includes the waters from shore to shore.

Now, the reference with respect to the pollution of streams submitted a question in very wide language—"To what extent and by what causes and in what localities have the boundary waters between the United States and Canada been polluted so as to be injurious to the public health and unfit for domestic or other uses?" That is, it took in all boundary waters, whereas the treaty said that the boundary waters not be polluted on either side to the injury of health or property on the other side. The record shows that the question arose as to whether under that reference the commission was required to go beyond the treaty and investigate the pollution of boundary waters from shore to shore. As a result of taking the matter up with the Governments, the Governments directed that the reference should be limited to cases of pollution of boundary waters on one side of the boundary which extend to and affect the boundary waters upon the other side; that is, as I read it, limiting the reference to the provisions in the treaty.

Upon the construction of article 4 that "they will not permit the construction or maintenance" of any obstruction, there is a case that I wish to refer to in supplementing what Mr. Campbell has said. The language in this case was very similar to what we have here. An English statute provided that no suit should be brought or maintained in any court of law or equity for the recovery of any sum of

money alleged to have been won upon a wager. "No suit shall be brought or maintained," was the language of the English statute; the treaty is that the countries "will not permit the construction or maintenance of any obstruction." It was held in the English case that the statute only applied to actions brought after the statute, and, although the statute read that no suit could be maintained, the courts expressly held that suits which had been brought prior to the statute could go on and continue their course as they would have done if the statute had not been passed. The case referred to is Moon *v.* Durden, reported in 2 Exchecquer Report at page 21.

As to the measure of compensation for any land, there is one United States case to which I wish to refer. That is the case of the United States *v.* Chandler-Dunbar Water Power Co. I cite it because the principles there laid down by the United States court, I think, are the same as those laid down in the English courts. The case is reported in 229 United States Reports, at page 53. The syllabus states that the fifth amendment is satisfied by payment to the owner of what he actually loses; it does not demand what the taker has gained. As pointed out by Mr. Rockwood, the value of this water power is immeasurable, looking years ahead; we can not calculate it. But that fact is not to be considered in estimating the value of the lands which may be submerged for the proper development of that water power and for the most desirable use of those waters.

I had intended to refer to the questions, especially question 2, but I think I have already dealt with that in answer to Commissioner Mignault's remarks. That is, unless this commission recommends a level higher than the normal or ordinary level of the lake the question of land values does not arise. My interpretation of normal or natural is what I stated yesterday—the ordinary, the usual level of the lake; and the commission is not required to go into an investigation of the lake in a state of nature. The word "natural" in some connections may mean in a state of nature, but I take it that it is absolutely impossible to ascertain the level of any body of water in this country in a state of nature before any settlement has come into the country, before any ditches are led into it, before any trees are cut down.

Mr. MIGNAULT. You might say this, possibly, that the state of nature had been altered or destroyed at the time of this reference. There had been an artificial state for some years, created by the dam, and, consequently, when the two Governments refer to the normal or natural level of the lake it may be that they refer to the then existing state.

Mr. LAIRD. That is my contention expressed exactly as I would like it.

Mr. GARDNER. Mr. Laird, do you think there would have been any controversy between the two Governments if it had not been for the fact that there has been an artificial change made in that lake?

Mr. LAIRD. I think regulation in the interest of everybody is bound to come on all streams where regulation can be adopted.

Mr. GARDNER. But if there had been no change made by either party in the natural level of the lake, would there have been any occasion for any controversy?

Mr. LAIRD. I can not imagine, knowing the history of the lake and the fluctuations in it, that one or the other country would not have desired a change in the level.

Mr. GARDNER. There is no doubt about that, but the fact that the change was made has led to the whole controversy.

Mr. GLENN. Mr. Laird, as I understood you yesterday, your contention is that normal or natural condition of the lake applies to the dam since the building of it and not prior thereto?

Mr. LAIRD. We do not need to go away back to the state of nature.

Mr. GLENN. We do not have to go back, according to your contentions, to the time before the dam was built?

Mr. LAIRD. Exactly. If we are to take the word "natural" in that limited, narrow sense, "in a state of nature," where are you going to stop? When did the first white man alter the level of the lake? When were the first ditches led into it? Certainly when the first railway was constructed that did alter the level of the lake.

Mr. GLENN. From where do you say we do start?

Mr. LAIRD. From the ordinary conditions at the time the treaty was made or at the making of the reference.

Mr. GLENN. And that has been since the dam was built?

Mr. LAIRD. Oh, yes; and, Mr. Commissioner, if you wish to start at the state of nature, I do not know when you would start; I do not know how far you would go back.

Mr. GLENN. I want to start where the treaty started.

Mr. TAWNEY. Mr. Laird, you are, perhaps, more familiar with this record than I. I have understood in some of the hearings that the original complaint on the part of the Government of the United States was not that the effect of this Norman Dam was to raise the level of the water too high, but that the effect of it was to lower the lake. Can you cite any evidence in the record to sustain that contention, or anything that indicates that that was the fact?

Mr. LAIRD. The letter referred to by Mr. Campbell yesterday from the Acting Secretary of State, dated May 6, 1905, and appearing at page 463 of the Winnipeg hearings, reads as follows:

DEPARTMENT OF STATE,
Washington, May 6, 1905.

SIR: In the river and harbor act of June 13, 1902, Congress adopted a project for improving Warroad Harbor and Warroad River, Minn. This project is now being carried out, the river and harbor act of March 3, 1905, having made an appropriation of $35,000 therefor.

The improvement depends very largely upon the level of the Lake of the Woods, all the estimates for dredging the harbor and its approaches being based upon the maintenance of this level at or above the datum of 7.2 feet on the Warroad Harbor gauge. During the past year it appears that the gauge reached that reading only for the half of one day, and that it fell as low as 6 feet for several days during the season of navigation. High-water mark is reported to be about 1.51 feet above this reading of 7.2 at Warroad.

Some years ago the Keewatin Power Co. built a dam across one of the outlets of the Lake of the Woods near Rat Portage, which dam, it is understood, subsequently passed to the control of the provincial government of Ontario, and it is thought that the level of the lake could be easily controlled by inserting or removing stop planks in this dam. There is understood to be much Canadian navigation on the lake as well as several water-power companies at or near the aforesaid dam, which would be benefited by the mintenance of the lake at the highest possible datum. In view of this it is suggested by the Secretary of War, in his letter on this subject of the 26th ultimo, that an agreement might be reached with the Canadian authorities by which the dam could

be so operated as to prevent the level of the lake from falling below the datum of 7.2 feet.

I have the honor, therefore, to ask if you will be so good as to lay the matter before the proper authorities of the Dominion, with a view to reaching the suggested understanding as to the maintenance of the normal level of the lake in question?

I have, etc.,

FRANCIS B. LOOMIS,
Acting Secretary.

Mr. HUGH O'BEIRNE, etc.

Mr. TAWNEY. What is the datum of 7.2 feet on the Warroad gauge on the basis of sea-level datum?

Mr. LAIRD. 1,060.8. The request, then, was not for lowering the water, but it was a request for keeping it up at least to that point. It was put upon the ground that the Canadians are interested in the navigation as well as we are, and, further, that the power interests at the outlet of the lake naturally desire a high level. Taking those two together, the Canadian interests desire a high level.

Mr. MIGNAULT. There is this point, Mr. Laird: In the last paragraph of the letter the Secretary wishes that an understanding be reached as to the maintenance of the normal level of the lake in question.

Mr. LAIRD. Mr. Campbell dwelt on that point yesterday. What did the Government of this country mean by normal level of the lake? They meant 1,060.8.

Mr. MAGRATH. Was not that letter withdrawn, Mr. Laird?

Mr. LAIRD. I am not aware that it had been.

Mr. CAMPBELL. In a modified way it was.

Mr. WYVELL. I am quite familiar with the matter, but I do not wish to interrupt.

Mr. BERKMAN. I would like to say that the Canadian Government never acted upon it, and I think the request was withdrawn.

Mr. MIGNAULT. The only point, Mr. Berkman, is this: It may be argued that the controversy at that time was not as to the level in the state of nature having been changed, but as to the desirability of having the level maintained at a point not lower than 7.2 on the Warroad gauge.

Mr. TAWNEY. The last paragraph in the letter of the Secretary of War to the Secretary of State, dated April 21, 1906, and appearing at page 464 of the Winnipeg hearings, says:

> Replying thereto I beg to inform you that the War Department does not consider the present time favorable for pressing the request for action by the Dominion authorities toward maintaining the level of the Lake of the Woods at 7.2 on the War-road gauge, as asked in previous correspondence on the subject, and prefers now that the matter be not urged further on its initiative until brought up again by further developments.

Mr. ANDERSON. That was never communicated, I believe, to Canada.

Mr. KEEFER. You will find, gentlemen, that that letter was never communicated to Ottawa, but, on the contrary, a further letter was sent to Ottawa asking for a reply to the former letter, and you will find how Ontario was dealing with the question in its report.

Mr. MIGNAULT. Are you sure that it was at a later date?

Mr. KEEFER. Yes, sir; I think it was.

Mr. MIGNAULT. I thought it was at a former date.

Mr. KEEFER. We will get that information accurately.

Mr. MIGNAULT. I think the letter asking for a reply preceded the letter from the Secretary of War to the Secretary of State.

Mr. BERKMAN. There is a question, Mr. Laird, as to whether they have any evidence of any letter in reply to this request on the Canadian Government.

Mr. LAIRD. Yes; there is a reply. Mr. Hugh O'Beirne acknowledged it and stated, "I have the honor to inform you that I have laid the matter before the Governor General." I take it that the Canadian authorities acted upon that request and that action would be the best compliance with the request that could be made. Personally I would much prefer not to discuss these international things, which, as Mr. Campbell indicated, are more within the proper province of counsel for the respective countries.

Mr. MIGNAULT. The entire diplomatic correspondence, Mr. Laird, is in Appendix C, beginning at page 516 of the record, and that gives the sequence of the different letters.

Mr. CAMPBELL. If I might be allowed to interrupt, I would say that the request from the Secretary of State went to Ottawa. It was then sent to Toronto for the Provincial Government, and they declined to admit the request in turn, because to keep it up to 1,060.8 would involve at certain flood seasons a level so much higher that it would do injury to Canadian interests. Therefore they wanted a mean level.

Mr. TAWNEY. The purpose of my question was to ascertain where in the record there was anything to justify the statement that has heretofore been made that the original demand or request of our Government was based upon the level of the lake being too low. I wanted to ascertain from Mr. Laird what part of the record indicated or justified that statement. He has read the letter. That is all I wanted.

Mr. LAIRD. The correspondence that we have been referring to was in 1905. Then, the next correspondence bearing upon the subject is that of June, 1911. The correspondence between the departments of the United States Government of June, 1911, indicates that the complaint there made was as to low water, and that correspondence contains the suggestion or recommendation that it be referred to this body. Maj. Shunk, in his letter of June 9, 1911, appearing on pages 477 and 478 of the record, says, "It is certainly to be recommended that this matter be brought to the attention of the International Joint Commission." That letter from Maj. Shunk is somewhat lengthy, and I do not think I should take up the time of the commission in reading it.

Mr. TAWNEY. We have the correspondence in the record and can read it.

Mr. LAIRD. The complaint was with respect to low levels. Then the matter is further followed up by Maj. Shunk in his letter dated June 30, 1911. In that letter he reiterates his request that the matter be referred to this body.

Now, a word or two further with regard to question 2. My submission is that unless this commission can recommend a higher level than the normal level, their duties are terminated by answering question 1. So far as I am concerned, we ask a higher level than even the normal level.

Mr. MIGNAULT. What do you take to be the normal level?

Mr. LAIRD. I think it is about 1,060.8, according to the United States engineers.

Mr. MIGNAULT. That would be your view?

Mr. LAIRD. I think probably 1,061 I would adopt as the normal level. Then, my point is that unless the commission can recommend a stated level higher than that normal level question 2 does not enter into it. But my clients want a higher level than that. Then, question 2 comes up and also the question of compensation.

Question 2 reads in part, as follows:

> If a stated level is recommended in answer to question 1, and if such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake when maintained at such level overflow the lowlands?

Then the question of valuation of those lands arises. But until we get above the normal level it does not arise. As power users, we desire that higher level, and, as indicated by Mr. Campbell and Mr. Rockwood, the power users consider that adequate and full compensation should be made to the landowners for the land necessarily taken for that higher level; but the method of levying that compensation upon the power users, of course, is a purely domestic matter. If the power users in Canada get the benefit of it, I have no doubt that the Canadian authorities would see that they would pay it ultimately. We are vitally interested in the best use of those waters. We have invested now in the plant in Winnepeg millions of dollars. The direct investment at the power plant is very large, $6,000,000 at the power plant alone, and then we have all the investment in Winnipeg for the light and power distribution systems and all the tramway systems there, all dependent upon this power. Then we have spent $600,000 in the development of the new site at Great Falls. That contemplates an expenditure of seven million or eight million dollars for the ultimate development of that site. Our interest is very, very great in the most advantageous uses of those waters. It is not an interest merely from the company's point of view; it is an interest of the entire community served by the company.

We have sought to give to the engineers of the commission all the information we have, and we have sought to lay before the commission our needs. We appreciate very fully the difficult task the commission has to harmonize all those interests, but representing one interest we can only present to the commission that one interest as fully as possible.

Mr. GARDNER. Have you ever been restricted in the operation of your plant by a shortage of water?

Mr. LAIRD. We have; yes. And when we are restricted the only thing we can do is to ask that a little more water be let down. As I said at the outset, the present regulation—or whatever you care to call it: there is not very much regulation about it—is sufficient for our present plant. I do not think that the conditions could be very much improved or enable us to develop any more power at the plant we are now operating.

Mr. CAMPBELL. Perhaps, I should say, so as to have the record straight, that the city's plant has not had any shortage of water. The street railways are developed up to the full amount of power, and they have had at times a shortage. We have not.

Mr. LAIRD. There is one further point that I wish to mention, and that is the development of what we call the new plant, the Great Falls plant. That is referred to very fully and discussed in the report mentioned by Mr. Rockwood yesterday. That report was not in our hands at Winnipeg, but if you are interested is ascertaining the possibilities of that plant and the development proposed there, I would refer you to Appendix 2 of that volume, page 333. It is an official document of the Dominion Government and was not prepared by us.

Mr. GARDNER. What is the title of that document?

Mr. LAIRD. It is entitled "Water Resources Paper No. 3."

Mr. MIGNAULT. Has a copy of it been filed with the commission?

Mr. LAIRD. A copy has not been filed, but one should be. It is referred to in several places in Mr. Rockwood's brief. As I stated, it was not in our hands at Winnipeg at all. I saw it myself only a few days ago.

Mr. MIGNAULT. You might possibly have a copy of that document sent to each of the commissioners.

Mr. MAGRATH. Mr. Challies can have copies sent to members of the commission.

Mr. LAIRD. As I am one of the junior members of the profession appearing before the commission, it would not be becoming of me to speak of the work of this commission, but before sitting down I would crave the privilege of associating myself with what has already been said as to the creation and organization of the commission and of its high significance from an international and world-wide point of view.

I thank the commission very much for the attention they have given this matter, and, as I have said, we who are interested in it appreciate very, very fully the magnitude of the question that has been referred to the commission.

ARGUMENT OF MR. C. P. WILSON.

Mr. WILSON. Mr. Chairman and gentlemen, I am here on behalf of the Lake of the Woods Milling Co. You will remember that at Winnipeg there was verified by the general manager under oath a statement which appears at page 410 of the evidence taken at Winnipeg. It shows that the value of the property is upward of $3,000,000; that the output is approximately 10,000 barrels per day; that they are using at present from 3,400 to 3,700 horsepower; and they expect further to increase the mills from time to time to their full developed horsepower of 5,700.

About the time the first of those mills was constructed, or just prior to its construction, there was an order in council passed by the Dominion Government, authorizing the vote of $7,000 for the construction of the Rollerway Dam. I would like to refer to the terms of that order in council, which is on file. It is to maintain the waters of the Lake of the Woods at a constant level and thus permit the shallow-draft steamers which have been built for navigation on the lake to ply for the whole season of navigation, thereby affording uninterrupted communication between the settle-

ments around the lake and the Canadian Pacific Railway. Subsection B says:

To maintain a constant head of water for the mills, both saw and grist, which have been and hereafter will be erected, and which depend for their power, and therefore their constant working, upon an ample supply of water, which would be given were the proposed dam constructed.

Mr. MAGRATH. Will you please give the date of the order in council?

Mr. WILSON. The date of the order in council is the 5th of April, 1887. In the text of the excellent report of your consulting engineers there is a historical introduction, and at pages 6 and 7 reference is made to the history of these two mills. At the foot of page 6 it says:

In 1881 a small cut was made through the rock ridge at the location of the present mill C headrace and power developed for operating a sawmill. This site changed hands several times during the succeeding years, eventually becoming the property of the Lake of the Woods Milling Co. about the year 1906 and now constitutes the site of what is known as mill C.

The reference to mill A is as follows:

In 1887 a canal, several hundred feet west of the first cut, was excavated by the Lake of the Woods Milling Co. for the purpose of developing power for flour milling at what is now mill A.

The next paragraph of that report shows that the Rollerway Dam, whose construction was authorized by the order in council I have referred to, was actually constructed in the winter of 1887–88.

The report of your engineers also shows, as stated by Mr. Campbell yesterday, that by reason of this control the height of the lake was maintained at slightly above 1,060. I think Mr. Stewart in his evidence shows that during the period from 1893 to 1914 it was at 1,060.2, the average during the summer months, and that included a couple of low years, I think in 1910 and 1911. From 1893 to 1908 it was 1,060.5. It was under those conditions that my clients made their development, and, instead of putting that in my own language, I would like to adopt a short sentence from the evidence of Mr. Acres, of the Hydroelectric Commission of Ontario, which appears at page 418 of the record. He says:

For one thing, the plants at the outlets of the Lake of the Woods have been operated for a number of years and have understood that they were operating under practically assured and normal conditions based on a level of, roughly, 1,060.

So that practically from the start that has been the level maintained in connection with our mills, and it has been quite satisfactory to us. That is the level that seems to be in the interest of navigation, which, I imagine, is the primary use of navigable waters. The cases referred to in the printed brief of Mr. Rockwood filed yesterday shows that that is recognized in the United States. They permit condemnation of land up to the ordinary high-water mark (which in the Lake of the Woods was above 1,060) in the interest of navigation, without paying any compensation. This treaty seems to recognize also, by article 8, that the existing uses of the water prior to the time of the treaty still continue.

There has, however, been overwhelming evidence offered here that, in the interests of the powers down the river, certain regulation and control should be made. I understand that it involves the enlargement of the western outlet and also provides for reserve or storage, and the result of that will be most disadvantageous at times to my clients. I am not, I may say, offering objection on that account to the suggested control or change, because my clients take the same view as Mr. Acres put forward before you at Winnipeg on behalf of Kenora—that is, that the interests are so large the greatest good to the greatest number should prevail. What we do suggest, as was suggested by Mr. Acres on behalf of Kenora, is that damage should be minimized, if that is possible, and that where it can not be minimized, if the damage is really sustained, compensation should be made. These improvements admittedly, by the evidence of the various witnesses called, are in the interest of the lower powers, which stand, as somebody suggested, 16 to 1, and I merely mention this so that the commission may take it into consideration.

As to the nature of that damage, I can also adopt the language of others to describe it. Mr. Meyer in his statement, which appears at page 455 of the record, says:

> There is just one matter that I think I should mention, and which will take me less than five minutes, depending upon the speed with which the reporter can make his pen go, to call attention to. Some of the interests I think should have it under consideration previous to arguing this matter before the commission. I refer to the question of the effect of the lower levels which may occur during periods of dry seasons on the upper plants at the outlets. We have been considering that question for several months, and all came to the tentative conclusion that it might be desirable to enlarge the western outlet merely with a view to regulating the lake levels and not with a view to developing power, and that if it were desirable to install a manufacturing plant in this vicinity on account of the convenience of bringing in raw material it might be desirable to develop a water power next below the outlets on the Winnipeg River and transmit the electrical energy up to that site and use it there by a motor-driven instead of direct-connected machinery.

That is introductory to the following sentence, which I desire especially to call your attention to:

> In that event current could be drawn from the same transmission line to supply the other plants at the outlets when these plants might not be able to operate at all or even economically on account of the low level of the lake during a period of dry years.

That is, we may be seriously damaged. There may be times when we will not be able to operate our plant at all or not be able to operate it economically, and the suggestion is that some means then might be taken to compensate for that by the construction of this power at the White Dog Rapids and the transmission by wires to power plants.

Mr. GARDNER. Have you ever been confronted with a shortage of water, so that you could not operate your plant?

Mr. WILSON. No, sir. We have been satisfied with the conditions during all these years, but, as I mentioned before, we must recognize the force of the contention that Mr. Campbell made yesterday, that the city of Winnipeg can get 60,000 horsepower by regulation where it could not get 40,000 before, and at so much per horsepower capitalized that runs up into many millions.

Mr. GARDNER. I understood you to say that you would be affected disadvantageously by an enlargement of the outlet.

Mr. WILSON. Yes, sir.

Mr. GARDNER. What do you mean by that?

Mr. WILSON. If you will again permit me, instead of using my own language I will use that of Mr. Meyer. That was the next reference I was going to make. Mr. Meyer's evidence to which I will call attention is on page 452 of the record.

Mr. POWELL. It creates backwater and lowers the head.

Mr. WILSON. That is it. When I get away from what I am told I am at sea. I have to rely upon what is pointed out to me, because my technical knowledge is nil. Mr. Meyer in dealing with the effect that would be produced on the powers on the Winnipeg River—and I am informed that the effect would be the same on our plant—at the top of page 452 of the record says:

> The power interests on the Winnipeg River below the outlets are rather seriously concerned with high rates of discharge, because the tail-water is raised and the head reduced. It is not an uncommon thing on large streams to find that the minimum power is determined by the flood flow rather than by the low-water flow, because the amount of water that can be discharged by a turbine, which is merely a special form of an orifice, varies with the head, so that not only is the head reduced but the quantity of water that can be used by a given set of turbines is also reduced; so that the reduction in power is more than proportional to the reduction in head.

I understand that the reason why the tail-water would rise at this particular place is that the water will go over the fall faster than it can run out below, and when you take the reserve flood water, if there is a reserve established, the flood water would cause such a rise that it would very materially affect the operations of the plants.

Mr. TAWNEY. Mr. Wilson, as I understand you, while your clients are satisfied with the existing conditions at the outlet of the lake as they relate to their use of the waters flowing from the lake, you concede that those conditions do not afford the most advantageous use of the waters flowing from the lake.

Mr. WILSON. In the interest of the community at large, I quite concede that.

Mr. POWELL. What level do you contend for?

Mr. WILSON. Naturally, power plants like as much high water as possible. It is just as suggested in the engineers' report, there is always the chance of low, but up to date we have been satisfied with existing conditions. I notice that the town of Kenora thought that a level above 1063 would hurt them. I asked my consulting engineer regarding that and he said that all that it might injure us would be altering the flumes—or whatever they are called—where the water comes in, which would be a matter merely of expense, and not a very great expense at that. So that the question of the height of the water does not affect us. What really does affect us would be the range, and that is where the river power interests and our own conflict. When it gets down they would want water below, when, under ordinary conditions, it would be kept up. That is possibly what is referred to by Mr. Meyer. At times we would be put out of business in low water and, similarly, we would be affected during high water. But if the question of range is a matter that is necessary, and your commisison could come to the conclusion that the large range is necessary, and that getting down to the low water

will damage us, that, of course, is something that would be a matter of compensation.

Mr. MIGNAULT. Mr. Wilson, Mr. Meyer, in the pages which you have cited suggests that by a development at the White Dog Rapids, I believe, you could be compensated for the loss of power by reason of an elevation in the tail water. Do your companies hold power rights with regard to the White Dog Rapids?

Mr. WILSON. No, sir.

Mr. MIGNAULT. Are the White Dog Rapids appropriated by any person?

Mr. WILSON. They are owned by the Province of Ontario. Mr. Acres in giving his testimony pointed out that one of the ways of, perhaps, taking off that flood water would be by blasting at The Dalles or at Throat Rapids; that is, by enlarging the outlets which at present confine that water. The water is in a narrow space. It runs into the river faster than it can go out at these outlets. That makes that rapid rise. That is one of the matters that would have to be considered. If we thought that they could remove that damage altogether by the constructing of certain works, we would be only too pleased. When Mr. Acres was giving his testimony, or, rather, speaking on behalf of Kenora, I think he made reference to that very thing.

I think his whole statement at pages 411 and 412 is worthy, because it is dealing with the conditions affecting the town of Kenora, and they are very similar to those which affect my clients. He says:

> The municipal plant at the town of Kenora was originally designed for a normal head of approximately 17 feet, and the possible injury arising from any order which the commission may make is due to the fact that a range higher than 1,063 will affect the stability of their works and that a range lower than, possibly, 1,058 will begin to cause trouble in the matter of reducing the capacity of their wheels. While this injury would be caused under such conditions, the town does not wish to go on record as objecting to any extension of the range below the point mentioned, although, of course, an extension of the range above 1,063 would be very serious. They merely wish to point out that if any specified lower level than 1,058 were to obtain they would consider any injury to their plant due to that lower level would render them entitled to some measure of redress.

Then, at page 412, Mr. Keefer says to him:

> I think, at the Kenora sittings, they gave us some idea of what their desires in that respect were. Is there any way that compensation could be provided other than by money, if you had to go below 1,058?
>
> Mr. ACRES. Yes; there are two possible ways. * * * One method is purely local, and that is by putting baffle plates over the wheels in order to protect the wheels from vortex effect. The other way is the possible means of relieving the whole tail-water situation at Kenora by enlarging the channel at The Dalles and Throat Rapids.

Besides the two ways there mentioned of injury, I am going to read one which was given to me by an engineer. Your board will probably understand what it means. I hope you will not ask for any explanation of it. In addition to the two ways he mentions, that is, by the low water and by the high water, or flood water, there is the fact that turbines and machinery are designed to work in harmony at certain speeds. A reduction of head or quantity of water reduces the speed of the turbines and machinery.

The result is that you can not get an efficient result as if the same head and quantity were used for which the turbines were designed.

Those, gentlemen, present the views of my clients. I want to urge

upon the board consideration of the facts that I have mentioned, the fact that the company has incurred this large expenditure, that the mills are producing 10,000 barrels per day of flour, that they are only using about three-fifths of the power that is capable of being developed. That is, the expenditure has already been made, so that the further development can be made, and having undertaken this expense at a time when the navigation interests, with the recognition of both the Dominion and the Ontario Government, and to some extent at any rate, officials of the American Government thought that that was the proper level, it was recognized that those conditions would continue, and, as Mr. Acres said in his evidence, these mills were constructed on the faith of those existing conditions, it rather comes to, as Mr. Commissioner Tawney said, instead of our power condemning the others, I am rather in the position of our company condemned in the interests of the others.

With regard to the question of control, which was asked by one of the members, it seems to me to be a matter of whether or not the question is one which affects both countries. If it affects both there naturally ought to be joint control. If the control is one purely as amongst the various industries on the Winnipeg River, that would seem to me to be a matter rather of Dominion concern, rather than international.

Mr. GARDNER. Do you not think, Mr. Wilson, you would be more likely to get a more satisfactory control under a joint management? Do you not think you would get a more satisfactory system of control under a joint arrangement rather than by representation from either one Government alone?

Mr. WILSON. At international points international control should be had——

Mr. TAWNEY. Where we provide or where we recommend or are asked to recommend in this case regulation of levels in the Lake of the Woods such fixing of levels involves regulation of the interests of the people of both sides of the line, whether the compensating works or other works that are constructed for purposes of making and regulating these works are off of the international line or not, but their effect is international. Should not that control, then, be international or by an international board rather than by a domestic board?

Mr. WILSON. The way you put it, sir, it seems to me very strong. I am not sufficiently familiar to know what the suggested powers of this control board would be. I have been under the impression that it was with reference rather to determining between the various power interests of the rivers how much water each of them should get. It is suggested that in the matter of limit or range of the high or low water, how that should be operated, when water should be let out as between the interests below and the interests above, the material thing might be under domestic control.

Mr. POWELL. That is involved in the other?

Mr. TAWNEY. It is necessarily involved in the other, is it not?

Mr. WILSON. I do not appreciate how it affects the status of others than those who are interested at the outlets and in the river below. I understood that Mr. Campbell's and Mr. Laird's clients were prepared to compensate those whose lands were on the Minnesota bound-

ary. I am not sufficiently familiar to state whose lands would be affected.

Mr. TAWNEY. The interests of navigation might be very seriously affected on both sides.

Mr. MIGNAULT. Mr. Wilson, I presume the counsel representing the two Governments will give us their views on this question of joint control, and I do not know that you need, on behalf of the private corporations, to express an opinion on a subject which is of national or international merit.

Mr. WILSON. If it were a personal opinion it would be of no value whatever.

Mr. TAWNEY. The purpose of my question was to ascertain whether they would oppose or acquiesce in it if, in the judgment of the commission, it was necessary to make such a recommendation. I wanted to get the views of the local interests with regard to all these recommendations, as well as the views of the representatives of the Government.

Mr. WILSON. One of the engineers suggests that the question of international control would properly come up before such a board, but as far as the operating from day to day is concerned, possibly some one on the ground would be required. That might be in a different position from anything that might affect international rights, and they might be subject to a board dealing with the matter from its international aspects.

Mr. GARDNER. Is the attorney general of Manitoba present?

Mr. HUDSON. Yes, Mr. Chairman.

Mr. GARDNER. Would it be convenient for you to be heard immediately after recess, at 2 o'clock?

Mr. HUDSON. I had not come here with the purpose of being present at this meeting. I had other business in Washington, and our Government is largely interested in a somewhat indirect way, but still interested in this question, and I thought it well to be present and hear what was said on both sides, and if anything occurred to me of importance I should refer to it. I thought it better to defer any remarks I might have to make until after the representatives of the Dominion Government had made their statement, if that is satisfactory to the commission.

Mr. GARDNER. I think that is perfectly satisfactory. I simply wanted to know who was going to be on hand here upon our reassembling.

Is Mr. McLennan present?

Mr. MCLENNAN. Yes, sir.

Mr. GARDNER. If it is convenient for you, we will hear you now.

ARGUMENT OF ALLAN McLENNAN.

Mr. MCLENNAN. I will occupy your time but very briefly.

As representing the town of Kenora my position is perhaps a little difficult, or out of the ordinary, at least, by reason of the fact that while the town is interested as an owner of the power it has a very considerable interest in an indirect way, in a community way, if I may so express it, not only in all the water powers at the outlet of the Lake of the Woods, but also in nearly all of the other interests

that are concerned in this investigation, particularly navigation, summer residences, and fishing.

I am perhaps expected to direct my remarks more particularly to water powers, but I can not help making a passing reference to the importance of navigation to the development of our district. I regard navigation, rightly or wrongly, but I think rightly, of paramount importance in connection with the development of our district, and particularly when you consider that the Lake of the Woods is a navigable body of water of an extent and grandeur that perhaps may not be found anywhere else on the continent.

I believe that statement is fairly borne out by the evidence of Mr. Ralph, the engineer for the State of Minnesota, taken at the hearing at Warroad in 1912, at page 92, as well as the evidence of the various other witnesses on the Canadian side of the line.

You will see from the evidence of the various steamboat captains and lumbermen at the hearing, at Kenora in September of last year, the great difficulties with which they had to contend under conditions such as prevailed in 1911 when the water was down to a stage of, I think, 1,056.5. That is the evidence of Capt. Hooper, Capt. Hickey, Capt. Kendall, and several other steamboat captains, as well as the managers of two of the larger lumber concerns. You also have testimony as to the extent of the lumber industry in the district, there being an annual pay roll of approximately $700,000.

It just occurs to me that there is, I think, a mistake in the evidence. I had proposed calling attention to it in the evidence of Mr. McLeod, at page 426 of the volume of evidence taken at Kenora in September of last year. The area of the pulp concession there, I think, should be 1,800 miles, not 18 miles, as was reported. I consider this would be of importance to indicate——

Mr. MAGRATH. Are you aware that Mr. McLeod raised a question as to some other mistake in his evidence?

Mr. MCLENNAN. Yes; the correction was quite in order.

Mr. MAGRATH. Was it made?

Mr. MCLENNAN. It was made. I had notice of it, and corrected it in the copy that I had.

Mr. MIGNAULT. What page are you referring to?

Mr. MCLENNAN. The correction that I referred to, as to the area, was at page 426 of the hearing at Kenora, in September, 1915.

Mr. MIGNAULT. He is credited with using the word "political," as I remember, and he did not intend to use such a word?

Mr. MCLENNAN. The "political atmosphere." What he stated was the "financial atmosphere."

Mr. MIGNAULT. Page 426. Eighteen square miles? I see; it ought to be 1,800 square miles.

Mr. MCLENNAN. There is also another mistake in the evidence of Mr. D. H. Currie, at Kenora, in September of last year. I can not give you the page just now. It was as to the investment of one of the small lumber men, Mr. Short. It is in the evidence as $7,500. It should be $75,000. It is not very material.

Mr. MIGNAULT. His evidence is at pages 487 to 495. It is about in the middle of page 490.

Mr. MCLENNAN. I do not know that it is very material, but I thought I would mention it in passing.

The evidence at that hearing of the several mariners and the lumbermen, as you will recall, went to show that by reason of the conditions of low water, such as prevailed in 1911, the cost of bringing their raw material to the mills was increased by from 25 to 50 per cent; and, in fact, some of the material they were unable to get out at all.

There was not much evidence as to the mining industry, which, also, is entirely dependent upon navigation. There is evidence that from one mine alone more than a million dollars in gold was taken, and that several of the mines produced similarly; and while this is not in evidence I regard it as the fact that had it not been for the excitement which arose in the cobalt district millions of dollars would be taken out of the mines at Kenora to-day.

As to the summer residence interests at that place, I have not, of course, been representing them heretofore, but when the suggestion has been made, as it has been made here, that the water should be raised or that the maximum level should be put at 1,064, on behalf of the town of Kenora, I would have to register an objection to such extreme high level.

Mr. MAGRATH. I do not think that suggestion is made.

Mr. MCLENNAN. I so understood it from Mr. Rockwood. I may have misunderstood it.

Mr. TAWNEY. One thousand and sixty-four was the maximum level for condemnation.

Mr. MCLENNEN. I might not have heard it correctly. In that case I have nothing to say with regard to that.

As regards the water-power interests of the town of Kenora, as I have already said, we are very intimately concerned in the general welfare of that interest as well as in our own particular power. The town of Kenora was one of the pioneer places in establishing and installing electricity in the way of public utilities in our Province. In 1904 the town, of necessity, by reason of conditions that prevailed, had to undertake to obtain and develop this water power, which development was undertaken to the extent of erecting a dam and power house and installing half of the turbines in 1905, I think.

Mr. TAWNEY. Was your power developed to its maximum? You utilized half of the water?

Mr. MCLENNAN. There are four out of six of the turbines.

Mr. TAWNEY. The development there is of sufficient capacity to accommodate the six turbines, is it not? It is sufficient to accommodate all the other equipment outside of the turbines?

Mr. MCLENNAN. At the present time it is quite sufficient to operate them all, but there is not, at the present time, a demand for the balance of the power, so that the wheels, for that reason, have not been installed.

Mr. TAWNEY. And the water is running to waste; you are not utilizing the water?

Mr. MCLENNAN. We are not utilizing that remaining portion of the power at the present time, so that the water is not being made use of.

The high range of level, of course, is an advantage to our power in the same way that it is to the other powers at the outlet, with the modification, perhaps, as has already been referred to by Mr. Wilson that it should not exceed, at all events, 1,063. In fact, what the town

of Kenora would be perfectly satisfied with as a maximum height would be 1,062.5.

Mr. GARDNER. What would be your idea of a level for navigation alone, without reference to other interests?

Mr. MCLENNAN. The evidence of all of the navigation interests goes to show that 1,060.5 is about the lowest level that they can operate without having trouble. I think the evidence of all of the steamboat men is to that effect.

Mr. GARDNER. How much fluctuation above that would you regard to be in the interest of navigation?

Mr. MCLENNAN. Higher water than that there would be no objection whatever to. There would be some advantages.

Mr. GLENN. You say 1,062.5 is the highest you suggest. What range would you want—5½ feet or 6 feet?

Mr. MCLENNAN. As to range we, perhaps, if we were only considering our own power, would have to differ somewhat from the suggestions that have already been made, for the reason that our power is constructed to accommodate a water level no lower than 1,058 advantageously. As I have said, our power was constructed in 1905, and we did not have at that time all of the data that would be available to us at the present time. The services of an eminent engineer were engaged, and with all the data conditions as he could ascertain them in a reasonable way, the power was constructed on the lines on which it has been done, so that a minimum level or a low level of anything less than 1,058 begins to be detrimental to the power interests of the town.

As has already been stated or referred to by Mr. Wilson, who last addressed you, and as was stated in evidence by Mr. Acres, the representative of the Ontario Hydroelectric Commission, in his evidence before you in Winnipeg in February last, the town of Kenora regards this question as of such great magnitude that it would, of course, not feel disposed to stand in the way of the commission dealing with the whole question in such a way as it might consider best in the interests of all parties concerned. The town of Kenora, of course, does desire that the commission, so far as possible, will minimize any damage that the town of Kenora might sustain, and would expect, of course, and confidently expect, that the commission will take care of our interests as well as they can in a reasonable way, the same as we expect they will do with the interests of all parties concerned, giving due consideration to the circumstances of every question.

I do not know that there is anything that I can add. I might just add that of recent years, not only with regard to the water-power plant, but all the other improvements and constructions that have been made in that locality, such as docks and boathouses and that kind of thing, have been constructed on the assumption that the levels that have prevailed in recent years might safely be taken to be the levels that were to prevail. It is true that there may be some docks, particularly of the Winnepeg people, on the lake that have been built without regard to prevailing conditions, and possibly adjusted to conditions as they were found at the time in certain instances, but the people, particularly of Kenora and that community, have quite understood that the levels as they have prevailed in recent years were the established levels as they might be regarded for the future.

Mr. GARDNER. I do not know but what you have already stated it, but would a level of 1,062 materially interfere with your town?

Mr. MCLENNAN. One thousand and sixty-two would be quite satisfactory.

Mr. GARDNER. It would not occasion any great amount of damages?

Mr. MCLENNAN. No, sir.

Mr. POWELL. Some of the summer residents would be affected.

Mr. MCLENNAN. I think, of course, that the summer residents, from reading the evidence at the hearing at Winnepeg, had not fully understood the conditions in connection with the proposal of a maximum range such as 1,062 or 1,062.5. From what I understand from the evidence of Mr. Stewart taken at the Winnipeg hearing in February last, and also from the evidence of Mr. Meyer, one of the commission's engineers, with the explanations that they make that this high level would only be reached once in a period of many years, I do not think that the matter is of any significance to the summer residents whatever.

We are very vitally interested in the welfare of the summer residence people, but we can not regard the high levels suggested as being of any moment to them whatever. In fact, from the explanations that have been made I understand that it is not probable, or at least improbable or impossible, that the high level of 1,062 would ever be reached, and that only 1 per cent of the time would it come up to 1,062, and that 90 per cent of the time it would not be more than a foot above the range of the ordinary high level of 1,061. I think I am correct in stating the figures.

Mr. TAWNEY. 1,061.8

Mr. MCLENNAN. I think the reference was at that time to 1,061. At all events, I am referring to the evidence both of Mr. Stewart and Mr. Meyer, which I think explains the whole situation very well and is perfectly satisfactory from the standpoint of the town of Kenora.

Mr. TAWNEY. This plant is constructed at one of the outlets of the lake, is it not?

Mr. MCLENNAN. Yes, sir.

Mr. TAWNEY. What is the name of the outlet?

Mr. MCLENNAN. The easterly outlet.

Mr. TAWNEY. In constructing, are there any obstructions left in the outlet as the result of the construction there—rock or anything of that kind left in the channels of that outlet?

Mr. MCLENNAN. It may be.

Mr. TAWNEY. Is it not a fact that there was?

Mr. MCLENNAN. I think it possible, but I am not in a position to pronounce on that definitely.

Mr. TAWNEY. Your city, I suppose, would be willing to remove any obstructions there in order to increase the discharge capacity to the full limit?

Mr. MCLENNAN. Quite. I thank you, gentlemen.

Mr. GARDNER. Is there any representative here of the power interests?

(No response.)

Mr. TAWNEY. Is there anyone here representing the prospective power development of the Rainy River and Long Sault Rapids?

Mr. KEEFER. I understand you are asking if there is anyone here representing the power development of the Rainy River and Long Sault Rapids?

Mr. TAWNEY. Yes.

Mr. KEEFER. I would take it that Mr. Rockwood would be best qualified with reference to that, and if it were brought to his attention he might wish to say something about it.

Mr. TAWNEY. Is Mr. Rockwood present?

(Mr. Rockwood at this point entered the room.)

Mr. POWELL. Have you anything to say on the Long Sault Rapids?

Mr. ROCKWOOD. I have nothing more than has been said in the past, and that is that my clients control the south shore and are looking to the development in connection with a lock for navigation purposes. The north shore, as I remember, is controlled by the Government. I am not quite sure about that.

Mr. TAWNEY. Has not the Government of the Dominion, or the Province of Ontario, granted to a private corporation a franchise for the construction of a dam at Long Sault, with a lock?

Mr. ROCKWOOD. I am not able to say whether the right has been granted, but I am quite sure that nothing has been accomplished, that there is no company that is prepared to go ahead with the lock. I think that is a project that will have to be taken up by the Government.

Mr. POWELL. Has not the steamboat company got some charter there?

Mr. ROCKWOOD. I can not say, Mr. Commissioner.

Mr. TAWNEY. I think you will find, in the evidence taken in 1912 at International Falls, that Mr. Graham and his associates in the Rainy River Navigation Co. gave some testimony with regard to what they were doing or contemplating doing, but I was just wondering if there was anyone here who respresented the power interests or prospective power interests. That is the only power that has not been discussed thus far.

Mr. ROCKWOOD. Perhaps I can say a word after refreshing my recollection and looking the evidence through so as to be able to call attention to what is in the record. A lock is necessary for navigation purposes, and my clients hope to see one put in. They hope to see the river made navigable to its full capacity, and they are waiting for the proper time to come to develop the water power and use it.

Mr. GARDNER. There was a gentleman here yesterday who represented Fort Frances.

Mr. MCLENNAN. While waiting, Mr. Chairman, I would like to mention that the town of Kenora supplies the power and domestic needs of the town of Keewatin, with the exception of the Lake of the Woods Flour Milling Co., as well as the town of Kenora.

Mr. GARDNER. The municipality owns the plant, do they?

Mr. MCLENNAN. The municipality owns the plant. They, of course, also supply power to the Maple Leaf Milling Co., in Kenora, which has a capacity of 3,500 barrels a day.

Mr. BURPEE. Mr. A. D. George, of Fort Frances, wishes to file a series of affidavits of Capt. I. Sherwood, Capt. J. A. Wallace, Capt. Ferris, and Capt. Allen. These are affidavits covering various points in connection with navigation of the waters of Rainy River and Rainy Lake.

Mr. TAWNEY. I suggest that they be received and placed on file in the office.

Mr. MIGNAULT. They have communicated with the other interests?

Mr. BURPEE. Apparently not; no, sir; they have only just been received.

Mr. TAWNEY. They do not go into our records; they will simply be received and filed in the files of the office here.

Mr. ROCKWOOD. May I call your attention to one thing in that connection. There was a hearing had at International Falls in January—January 28 and 29—by a committee of the commission. The members of that committee, Mr. Tawney and Mr. Mignault, will remember that almost all of the two days solid were taken by landowners, and that the interests that were represented by myself, Mr. Richardson, and Mr. George got no hearing until 4 o'clock Saturday afternoon, and then there was a large number of witnesses present who had been waiting during the two days, and among them were those steamboat men. The committee sat until late that evening hearing witnesses on the subject of damages and navigation, and then request was made for further hearing, and the question was discussed of the return of that committee to International Falls.

I did not hear what occurred at the time of adjournment, because I was obliged to leave that evening to go down to Minneapolis on my way to Winnipeg for the meeting that was to occur the following Tuesday. My understanding was that there was a request for opportunity to put in this very evidence.

Mr. TAWNEY. On page 196 of the hearings you will find a record of what took place. It was not a request for further hearing; it was a suggestion that they might want to put in additional testimony, whereupon I said:

> I can say that we will present this matter to our associates, and the same will apply to any additional evidence that Mr. Richardson may want to give. I think the best plan would be to defer any further evidence on the condition of Rainy River and Rainy Lake until you hear further from the commission.

Then, finally, I said:

> We can only say that these are matters which we will present to our associates, and we will consider the relevancy of the facts which you desire to present to the commission with respect to the report we will have to make to the two Governments, and if we deem it material and relevant there will have to be another hearing at International Falls for that purpose.

That was the record with respect to the flooding of Pithers Point.

Mr. ROCKWOOD. I received copies of these last evening and have looked them over. They are by these steamboat captains with reference particularly to two points—the former periods of high water and the desirability of a range between 497 and 500 for navigation purposes. They all recommend 500, and show the difficulties of navigation, whenever the water falls below 497. They also show that navigation has been much improved by the existence of the dam, because it has preserved a more uniform stage and prevented the water from falling to a point where it practically destroyed navigation.

Mr. TAWNEY. Speaking for myself, personally, with reference to the affidavits, if they were presented to the attorney general of the State of Minnesota, and Mr. Samuelson, who represents the riparian

owners on the lake. I would have no objection to their going in as part of the record.

Mr. GLENN. It is only cumulative. We have a great deal of that same testimony already.

Mr. TAWNEY. Unless it is agreeable to them I do not think it would be proper to receive them.

Mr. SAMUELSON. Counsel has rather suggested that by reason of the time taken up by the settlers at that session these gentlemen were not heard. In order that there may not be any undue inference taken from that statement, I will say for the benefit of the counsel that made the statement that it was entirely due to his associate, Mr. Richardson, that the time taken up by the settlers was as long as it was, because of the irrelevant cross-examination that was made on pinhead points in that examination, so far as the settlers were concerned.

Mr. TAWNEY. The record shows who consumed the time.

Mr. MIGNAULT. And, Mr. Samuelson, the point which my brother Mr. Tawney has put to you is whether you would agree to these affidavits being put in as a part of the record.

Mr. SAMUELSON. Until I had seen the affidavits I would not want to make any statement one way or the other.

Mr. ROCKWOOD. Yesterday I reserved, or asked, at least, the privilege of being heard again in reply after I had heard other counsel.

Mr. POWELL. It is customary.

Mr. ROCKWOOD. I would like to have it understood that that request is open.

Mr. TAWNEY. It is open to any of you.

Mr. GARDNER. Is there anyone here to represent the navigation interests or the harbor interests?

Mr. ANDERSON. We are interested in public navigation and harbor interests. I understand it is private interests you are referring to now?

Mr. GARDNER. Exactly.

Mr. SAMUELSON. Mr. Rockwood, I understand, represents the Rainy River Improvement Co. which, I understood him to say yesterday, was interested in navigation because of the fact——

Mr. POWELL. Above the dam at International Falls, he means. This is navigation on the Rainy River and Lake of the Woods.

Mr. SAMUELSON. I do not know that there is anything in the record or anything in the articles of incorporation of the Rainy River Improvement Co. as to whether it is above or below the dam.

Mr. BERKMAN. I think Mr. Rockwood represents some of the lumber companies at Kenora, so far as they are interested in the cost of transporting lumber and timber across the lake.

Mr. POWELL. We know what they want. They want the water as high as possible.

Mr. ROCKWOOD. Mr. Chairman, if I might, I would rather reserve the whole of my statement until later. One of the companies that I represent is a navigation company that has already improved the navigation of Rainy Lake, Minn. Everybody concedes it. It stands out. I want to say a further word on that line. I would rather consider the whole thing at one time.

Mr. GARDNER. Does your interest apply to the Lake of the Woods?

Mr. ROCKWOOD. More particularly to Rainy Lake, but the Keewatin Lumber Co. depends upon the navigation of the Lake of the Woods for supplying its mill. If my clients reach the point, as they hope to, of building a pulp mill at the outlet of the lake, that industry will also be dependent upon navigation. It is part of the same thing that Mr. McLeod referred to in his evidence—getting supplies to the mill. I shall be exceedingly brief, I think. I hope to be, at any rate, very brief in what more I have to say.

Mr. GARDNER. You would rather take that up at one time?

Mr. ROCKWOOD. Yes, sir.

(Whereupon, at 12.20 o'clock p. m., the commission took a recess until 2 o'clock p. m.)

AFTER RECESS.

The commission reconvened, at the expiration of the recess, at 2 o'clock p. m.

Mr. TAWNEY. Gentlemen, just before the recess was taken there were some affidavits presented in respect to certain conditions in connection with Rainy Lake, which were to be gone over by the representatives of the State of Minnesota, the private landowners, and the city of Fort Frances, with a view of determining whether or not they had any objection to their being received. We might as well dispose of that matter now, in order to have it appear consecutively in the record.

Mr. HILTON. Mr. Chairman, I have examined the affidavits and am prepared to concede that if the witnesses who make such affidavits had been present at International Falls they would have testified to what is contained in them. Of course it is to be noted that there was not any opportunity to cross-examine them, and we do not want to be assumed as admitting the correctness of anything in the affidavits. Furthermore, the statements in the affidavits relative to anything but navigation are immaterial, for the reason that the averrents only show their competency to testify in regard to navigation matters and not in regard to agricultural lands or the flooding of such lands.

Mr. TAWNEY. Subject to the qualification you have mentioned, there is no objection to their being received and filed?

Mr. HILTON. No.

Mr. TAWNEY. Is that your position, Mr. Samuelson?

Mr. SAMUELSON. I adopt the statement as made by the assistant attorney general of the State of Minnesota, and they may be received, subject to the conditions stated by him, as far as the settlers are concerned.

Mr. TAWNEY. Is that your position, Mr. Clapp?

Mr. CLAPP. Yes. Of course I do not think that we are in a position to make hardly any objection at all. I would make the objection that if there is any further hearing held with regard to the levels in Rainy Lake above 497 these gentlemen be called.

Mr. POWELL. We will receive them and give such weight to them as we see fit.

Mr. TAWNEY. Mr. Murray, what is your position in regard to these affidavits?

Mr. MURRAY. I am somewhat familiar with the matter because these witnesses all testified in relation to the indictment that was preferred against the power company by the town of Fort Frances for flooding and encroaching upon the highway running along the banks of the streams. In the proceedings in that indictment, which resulted in a disagreement of the jury, I think all of these men testified to practically the same statements that they make here.

Mr. TAWNEY. Are you prepared to concede that if they were called before the commission as witnesses they would make the same statements as contained in these affidavits?

Mr. MURRAY. Yes. You will remember, Mr. Commissioner, that it was the evidence taken in those proceedings that I asked be put in the record. I would like to put that in. I have not it with me, but would like to put it in.

Mr. TAWNEY. That was considered by the commission, Mr. Murray, and in view of the fact that the judgment was not a final judgment of the court, it was not deemed competent testimony in those proceedings, and these affidavits are offered merely for what they are worth and will be received subject to the objections and conditions stated by the assistant attorney general for the State of Minnesota.

Mr. MURRAY. Then I concur in the position that these other gentlemen take.

Mr. TAWNEY. Then they will be received. Now, gentlemen, we have heard the power interests, so far as those interests desire to be heard except in rebuttal, and also the private parties interested in navigation and fishing. The next is the agricultural interests. Congressman Steenerson is present and represents the agricultural interests. We know that his public duties are and will hear him first.

ARGUMENT OF HON. HALVOR STEENERSON.

Mr. STEENERSON. Mr. Chairman and gentlemen of the commission. I regret that I have not been able to attend all the hearings of the commission, nor to give such study to the facts and the law as would enable me to be of very much assistance to the commission. However, inasmuch as the commission is kind enough to hear me, I will say a few words in the way of a summary of what we claim, both as to the law and facts, and the detailed reasons evidenced in support of these various positions. Such additional positions as we may take will be argued at greater length by Mr. Berkman, who has given the case most careful attention, and who represents the same interests.

As I stated when I put in an appearance in this case at Warroad, Minn., last September, I appear for the people of my congressional district, or, at least, for the people on the south shore of the Lake of the Woods, and not as an attorney representing any particular interest.

The situation, as I found it when I arrived at the hearing, in pursuance of a request from some constituents, was that there was really no attorney to take charge. I think Mr. Berkman arrived at about the same time and there had been no preparatory work. So we were not able to present our case in as orderly and

logical a way as we probably would have been able to do if we had had some preparation.

This case arises under article 9 of the treaty, and is one of the questions and matters of difference between the two countries, or the inhabitants of the two countries, which is contemplated by that article of the treaty.

I do not for one moment want to take up any time before this commission in answering the suggestions that have been made here in regard to the statute of limitations and prescription, etc., because I am well satisfied that the commission has views on that, but it is well to bear in mind why this treaty was negotiated before we go into any detailed discussion. It was because these two great nations desired to have all controversies and matters of dispute between them and between the inhabitants of each disposed of in a just and peaceable manner.

Applying the principles underlying this action to the case in hand, we find here the Lake of the Woods, waters flowing into it from both American and Canadian lands at the upper side, all of which waters have their outlet from the lake in Canada. About the year 1884, as it appears in evidence, if I recollect rightly, owing to the fact that the lake was then at a very low stage, about 1,050, and, owing to the fact that in those days one of the most important uses of these waters was navigation, an application was made for the construction of a dam for the raising of the waters, and the dam, four years later, was built. Subsequently, other dams were built, raising the level of the lake. Every act which raised the water was in the jurisdiction of the British Government. These obstructions to the outflow caused the water on the American side, as well as that on the Canadian side, to back up and, in some instances, to seriously injure or destroy the private property belonging to the citizens of the United States. Now, if that obstruction had been located within the United States, even though it had been in another State than that of Minnesota, the aggrieved parties whose property rights were being damaged or destroyed could have had their remedy in court. They could probably have had the maintenance of it enjoined, so far as it injured private property, because it is a universal law that no one may rightfully obstruct the natural flow of a stream or watercourse to the injury of the riparian owners along that body of water. But in this case the American owners could not bring an action for an injunction. This dam or obstruction was authorized by the Canadian Government or provincial government. It was a governmental affair. They could not be brought into the United States and be sued, nor could our officers proceed in their jurisdiction to abate the nuisance. We have, therefore, this result, that for more than 25 years the property of American citizens was taken, damaged, or destroyed, without any possible relief or remedy. They could sue nobody. They were helpless. Under these circumstances it illustrates the false logic of these ardent advocates and special interests, power companies and railroad companies, when they seek to invoke the statute of limitations. Who ever heard, for instance, of the statute of limitations running against an absentee who never submitted himself to the jurisdiction? And what good was the statute of limitations when these people had no rights in any way? Their property was effectually taken by force and destroyed, and they had no right

to sue anybody. What is the use of burdening your backs with borrowing the statute of limitations, when we had no remedy at all? That is where we were when this treaty was made. But there was a place where human rights are respected.

It has been said that international law has its origin, first, in usage or custom, which is the common law of nations, then in treaties, and, lastly, in the moral law. It is fortunate for mankind that men have been created in this manner; that, no matter what difference in intellect, in power, in ingenuity, in special talents, there is one respect in which they are all substantially equal, and that is that they have a sense of the moral law of right and wrong. Even the uneducated and the untrained have implanted in their nature this power of distinguishing right and wrong, so that they are in that respect on a substantial footing with anyone.

These two great nations could not stand by and see a thing done that was wrong without giving a remedy. That is the object of and motive for making this particular arrangement, to afford relief where there was no relief at all, but where at least the moral law has been violated in that one man had obstructed the natural flow of the waters so as to injure and destroy the property along that body of water. For this reason we have this agreement.

The power of this commission with respect to affording relief is rather undefined, but we must arrive at it as best we can. There may be other differences within the meaning of this treaty with regard to the maintenance and the future development of power by means of further works. That, of course, would be included.

So far as these interests that I represent, which are not only the agricultural interests, but the navigation and fishing interests and the domestic uses, are concerned, we have certain contentions to present to the gentlemen of the commission which we base upon the evidence before you. We want you to bear in mind all the time, not that we are trying to enforce a written agreement about something, but that we are trying to obtain such relief for the past and such precaution against injury or damage in the future as may be approved by the enlightened conscience of you men as representing two of the greatest nations upon earth.

I am sure that it is unnecessary to discuss the points raised in regard to what the word "level" means in this reference, or what the treaty covered. We were no worse off after 25 years of wrong, so far as a remedy was concerned, than we were the second or the first year that our property was taken, because we were all the time simply helpless, except for an appeal to the conscience of the Government in control of affairs.

It is argued in behalf of the water-power interests, first, those which may develop water power on the waters flowing into the lake, and, second, those who desire to develop or hope to develop water power to a greater extent than is now developed at the outlet of the lake where there is a fall of some 19 or 20 feet. Then, there is a third class who hope to develop further water power in the Winnipeg River after the water has fallen out of the Lake of the Woods for some 20 feet and begun its course in the channel to Lake Winnipeg. It does not proceed very far in that course before it is joined by other tributaries originating wholly in Canada. At a distance of some 30 or 40 miles it is joined by the Great English River, which

at times, I believe, is almost equivalent in volume to the Winnipeg River itself, and numerous other streams. I do not know whether it was contended in earnest or simply as an illustration of the powerful imagination of the modern Bellamy, Mr. Rockwood, when he referred to Nelson River and the wonderful power to be developed by letting the water out of the Lake of the Woods and letting it flow down through that river and into Lake Winnipeg and then take its course in Hudson Bay. So far as the evidence goes, I know of no one who has ever claimed any development proposition of that kind. But it illustrates the imaginative powers of the gentleman, and shows the dangerous thing it would be to follow him too far.

Now, I take it that this matter must be considered from a more practical point of view. We must take the world as it is, and, although it is true that the Canadian northwest has developed beyond the dreams of many, and that Alaska has far surpassed the expectations of Seward when he bought it, yet those facts have no particular bearing upon the question before a tribunal of this kind. We must come a little closer to practical affairs and consider the world as it actually is.

These water-power interests make their contentions. In some respects their interests seem to coincide. In some respects they seem to differ. For instance, the waters that flow into the Lake of the Woods possess a latent power, not developed, but if you raise the level of the Lake of the Woods to the level of 1,063 or 1,064—for instance, the Long Soo would be obliterated, so far as a water-power proposition is concerned. So that the interests represented up there—of course, they are not actually represented up there, but it is a water power existing in the State of Minnesota—would be subserved, they say, by a very high level. On the contrary, the gentlemen who have spoken on behalf of the development on the Winnipeg River say it makes no difference to them how high nor really how low the level is. My friend Mr. Campbell frankly stated that it was not a question of how high or how low the level was, but what they wanted was a wide range of levels. So far as I have been able to listen to the arguments presented at this hearing there is only one interest, and that is the interest represented by Mr. Rockood, that asks for a level of 1,062 or 1,062.5—I do not remember which. That is the only interest, and I presume that he felt that he was rather lonely in that position, and therefore wanted to fortify his isolation, so to speak, by showing up the wonderful magnitude of the interests that he represents or that would be developed by the capitalists that he represents. He does not show that there is any great water-power development at the outlet of the Lake of the Woods. We have been there. We know that the flour mill that is there, which is owned by Mr. Rockwood's client, I believe, or which is connected with him, is grinding its own wheat. They buy the wheat and grind it and sell flour. That is not a public institution like the old-fashioned gristmill used to be in early days. It is a speculative matter. It is not a public necessity particularly, but it is not a very large institution at that. There is plenty of power for that and for the proposed pulp mill that he indicates is going to be built there and regarding which they have testified. So far as the municipal plant is concerned, nobody has ever claimed that there is not sufficient power for that at a very much lower level than we contend for.

Now, what are the other interests besides these three water-power groups, besides the ones represented by Mr. Rockwood and the city of Winnipeg and the railway company down on Lake Winnipeg, as also at the city of Kenora? Outside of those water-power groups that say they would be satisfied with a high level there have appeared before you the representatives of navigation; those who represent the United States Government in the improvement of navigation at Warroad and Zipple Bay Harbor and on the Rainy River; those who use the waters for that purpose. Mr. Paul Marschalk and others, who are interested in fisheries, have appeared before you and explained what they require. The agricultural interests have appeared before you not only to show the value of their lands which have been damaged or to show the value of representative farms, but they have called the drainage engineers who have charge of those great drainage improvements going on in northern Minnesota and which are destined to reclaim four or five million acres of land from the wilderness and make it a rich agricultural country. They have appeared before you and shown you the effects of a high level. The summer resorters and those who live in the vicinity of the lake permanently and who have farms in that vicinity have appeared before you and shown the advantage to them of a reasonably low level and how they can then avail themselves of the beauties of nature and not be offended by an overflowed lake and stagnant pools. The people of the village of Warroad especially appeared before you and showed you how it had affected that village. The underground water seepage into their cellars and basements was shown, and any person at all familiar with such things knows that it makes that town very much less attractive to live in, less healthy, if a high level should be maintained. In fact, I go so far as to say that if the highest level contended for here should be adopted it would wipe out that promising place with its churches and schools and civilization, and it would wipe out some of the most splendid farms in the whole country.

Mr. GLENN. Would a level of 1,062.5 do that?

Mr. STEENERSON. Yes. My friend and associate, Mr. Berkman, will explain that more in detail. I am simply suggesting our contentions.

All of these interests are important. It seems to me, Mr. Commissioners, that we can not very well as reasonable men representing these great Governments consent to the possibility of destroying these farms and these happy homes for the sake of an imaginary wealth to be created out of water power. It is rather a strange thing to me that such a water-power expert as my friend Rockwood should present here in his brief a statement of the value of water power, and the lowest value that he places on water power in any of these developments that he proposes is $10 a horsepower. He wants to make nitrogen, to extract nitrogen out of the air for fertilizer, and he thinks that can be done away up on Nelson River. Well, anybody that knows anything about that—and we have had lots of it in Congress during late years—knows that no proposition of that kind can be made to pay unless they can furnish the water power at at least $5 or $6 per horsepower per year. That has been testified to. There are numerous reports before the commission. Why do they go away up into Newfoundland or away up into Canada

where there is very little population and develop water powers? Because it does not cost so very much and they have water transportation for their fertilizer. Why do they go up into the mountains of Norway, where, I am told, they have 1,500 or 2,000 feet fall? Because it was an exceptional location where they could establish a plant at a very small comparative cost in proportion to the amount of water power to be developed and, consequently, we have here imports of calcium nitrate for fertilizer. But so far as this proposition is concerned, it seems to me visionary in the extreme. There is no very great demand in that vicinity now nor will there be in the immediate future for any such gigantic water-power supply. There is more water power now than they absolutely use. Winnipeg does not use its water power. But it is proposed for the sake of some possibility of development 100 years or 50 years from now to authorize the destruction of this property. It seems to me that for the representative of any government to do so would be following the example so aptly illustrated in Æsop's Fables where the dog dropped the meat and grabbed at the shadow. We have here a prosperous country developing fast. It is only a few years since northern Minnesota was released from the Indian titles. Four million acres of that country was Indian country until about 25 years ago. Only a few years ago that northern country was a wilderness. The hardy pioneers have gone in there and suffered a great deal in the development of that region. They have cleared the forests and built their little homes and, although they may appear humble to some of the people coming from the cities, they are the result of hard, honest labor, and the place where free men are born and bred. That country is destined to be one of the greatest parts of the great State of Minnesota. The soil is unequaled. Are we going to wipe out of those people for the will-o'-the-wisp that now rests simply in the minds of some of these applicants for water-power development? Shall we take away that which we have for some uncertainty like that?

But these interests are regarded most tenderly in the law of both countries, and were regarded most tenderly when this treaty was made. It was well said by my learned and distinguished friend and great lawyer, Mr. Campbell, that this treaty must be read together as one document for certain purposes in order to understand it. I say that these interests that I represent were tenderly regarded by the two Governments and their representatives when this treaty was made, because in article 8, where they confer final jurisdiction upon this tribunal to deal with the matter, they were particular to specify the importance and the rights of precedence in these things; whether mammon itself should be deified as some of these gentlemen want, or the home, the place where a man has his habitation, shall be regarded even higher than so many dollars and cents, for we find here that the following order of precedence shall be observed among the various uses enumerated hereinafter for these waters, and no use shall be permitted which tends materially to conflict with or restrict any of the usages which is given preference. They are stated in article 8 of the treaty as follows:

(1) Uses for domestic and sanitary purposes.
(2) Uses for navigation, including the service of canals for the purposes of navigation.
(3) Uses for power and for irrigation purposes.

Mr. TAWNEY. I do not wish to interrupt your argument, Mr. Steenerson, but I would say that that applies to the obstruction and diversion of waters under articles 3 and 4.

Mr. STEENERSON. I understand it, but it simply shows that in another part of the treaty they were overcautious, thinking that perhaps the commission might forget that there is a relative importance, that there is a precedence. Question 1 of the reference reads as follows:

> In order to secure the most advantageous use of the waters of the Lake of the Woods and of the waters flowing into and from that lake on each side of the boundary for domestic and sanitary purposes, for navigation and transportation purposes, and for fishing purposes, and for power and irrigation purposes.

Power is the last, because that may be the source of wealth.

Mr. POWELL. Where would the conflict come between domestic uses and power uses?

Mr. STEENERSON. I assume that domestic uses refers to boating, fishing, summer resorting, and to water supply for the city, and if there is a reasonably low level the streams flowing in are more swift and the water is purer.

The Supreme Court of the State of Minnesota in deciding the constitutionality of the drainage laws said that the court takes notice of the fact that drainage off of land instead of letting the water remain stagnant is in the interest of health. I should say that domestic uses, so far as I have been able to understand the evidence, agrees with these others in demanding a low level.

We have shown the value of this property; that is, we have shown the value of representative farms, and we have shown the value of the property in Warroad. I presume, perhaps, my associates will figure up the total property interests affected. It amounts to millions. It is something that can not be very well calculated, because there is a possibility of developing farming as well as water power. Now, the reason why potential power is developed is because there is a demand for the power at profitable prices. The water powers in Alaska are not developed because there is no demand for the power.

The more country that is cultivated and the more intensively it is cultivated, the more prospective increase in property there is. We would be just as well justified in putting on an economist to figure out how much more valuable the property in the city of Warroad would be for its population and that which can be supported by the agricultural lands around that lake; and we would probably show a million dollars. I have no doubt that Warroad in 10 or 15 years would be a city of 10,000 population if the development were not arrested by an unduly high lake level. It is not a matter that can be measured any more than the prospective power development can be measured. It is simply a matter of speculation. We could put one speculation against another, and I doubt not if we had equal imaginative faculties that we could outspeculate the friends on the water-power question at showing the wonderful wealth to be produced by market gardening. I have eaten celery grown on the side of the Lake of the Woods that surpassed any celery grown anywhere else in the world. And celery farms are worth $2,000 an acre. Mr. Harpley at Duluth has a celery farm at Cass Lake, where he produces enough celery to have a profit of $1,200 an acre, if he had a market for it. And there is just as good a market there for celery

now as there is for Mr. Rockwood's water power. The billion dollars that Col. Sellers, Mark Twain's famous character, saw from the eye water that he was going to manufacture sinks into an insignificant sum in comparison.

So we will come down to this: The interests that I represent and which are represented by my associate, Mr. Berkman, are to be preferred. In the first place, it is conceded that it is practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level, as mentioned in clause 1 of the reference. That is, perhaps, not stating it as strong as I ought to. Some of these representatives claim that it is not desirable to have a stated level, but I submit without further comment that we agree with those who framed that reference that it is desirable and that the evidence is conclusive on the point that it is desirable to have a stated level.

Mr. TAWNEY. Do you mean by that, Mr. Steenerson, a fixed level or a stated range of levels?

Mr. STEENERSON. I mean substantially a fixed level. Of course, nothing in this world is absolutely fixed. I was at the Bureau of Standards once and they showed me an instrument which when a bar of steel a foot through was placed in a certain position would indicate the amount that that bar would bend by placing your finger on it. To my surprise, I could see that big bar of steel bend by pressing on it to the extent of, perhaps, a few pounds. So there is nothing fixed in this world. But we want the level substantially fixed, as near as a watermark can be; and it seems to me, from all the evidence of these engineers, that is perfectly practicable, because it is just like any other basin of water. If you control the outlet, although you may not control the inlet, you can increase the outlet so as to regulate it substantially. There is no dispute in the evidence about that. It is perfectly practicable, if that is what the word practicable means. It is feasible to control it; and I might say, before I forget it, that I fear now that some of the settlers along the Lake of the Woods in a very few weeks, when they want to put in their crops, will have them drowned out, or, rather, their lands will be submerged by reason of the opening at the outlet not being wide enough. The commission, in view of the urgency that was presented at Warroad last fall, was kind enough to intimate that if this case dragged out so long as that they would issue an interlocutory order, if we might so call it, and direct the level to be kept within bounds. It is perfectly feasible for the future to construct such works as to control the level at whatever point may be desired. It is not a question of power to regulate the lake level, as I understand it; but it is a question of whether you want to regulate it. These people who want to have a peak load say raise the level of the lake up to where it was in glacial times. They, of course, are not particular about the fluctuations, whether it goes down or up, as long as they have plenty of water. But the reference here asks this question, and I say that the evidence is overwhelming and undisputed that it is feasible and practicable and desirable to control the level.

It must be controlled at a stated level not for one day or one month, but at a stated level for the different seasons of the year. Everybody knows that it goes down, perhaps, too far for navigation at one time and goes up too high for farming and for other purposes at other

times. That should be avoided if you are regulating it to subserve the most important interests. It is altogether a question of preference who shall be considered. Next after that is the question as to whether or not we shall give consideration to the water-power development over and above that, and then, of course, the next question would be as to compensation for that part of it.

Mr. POWELL. Before you pass to that, Mr. Steenerson, the words are a little ambiguous, to my mind, there. The words of the reference are, "Is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level?" Does that mean distributive as respects the seasons, that we are at liberty to fix one level for the spring, one for the winter, one for the agricultural season, and one for the autumn, or does it mean that we must describe, if possible, one level throughout the whole year?

Mr. STEENERSON. I do not know whether it would be against my interest or not, but I am inclined to the latter view.

Mr. MIGNAULT. You assume that it is possible to maintain a fixed level, Mr. Steenerson?

Mr. STEENERSON. Yes; substantially a fixed level.

Mr. MIGNAULT. Supposing the commission were to arrive at the conclusion that it is not possible to maintain a certain level, what would you suggest?

Mr. STEENERSON. I would suggest that they report what kind of level should be substantially fixed.

Mr. MIGNAULT. Assuming also that we had to recommend a range of levels, what range would you suggest?

Mr. STEENERSON. I will come to that in a minute.

Mr. MIGNAULT. I do not want to disturb you. I was just suggesting those points, because you see there may be engineering difficulties and we may find ourselves in such position that we can not do what you seem to desire we should do. In that case I would like to know what suggestion you would make.

Mr. STEENERSON. Perhaps it is covered in my more deliberate remarks which have been reduced to writing.

Upon the question of the level, to which Mr. Mignault refers, we contend that it should be coincident with the ordinary high-water mark as it would be in a state of nature, which, we submit, the evidence establishes would be found at the level of 1,057 feet above sea level according to datum used by the consulting engineers.

On behalf of these riparian owners and the people living on the American side, or American shore of the lake, it is conceded that it is practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level, as mentioned in clause 1 of the reference, and the only question that we desire to argue before the commission under that clause is what level should that be? Upon that point we contend that it should be coincident with the ordinary high-water mark as it would be in a state of nature which, as we submit, the evidence establishes, will be found at the level of 1,057 feet above sea level, according to datum used by the consulting engineers. I do not mean by that that 1,057 was the high-water mark, but it is the relative place where it would be if the obstructions were considered in the natural state. I will come to that later.

In order to arrive at that level we should bear in mind the legal definition of the term "ordinary high-water mark." One of the best definitions to be found in the adjudicated cases is that in the case of In re Minnetonka, 56 Minnesota, in which case the decision was rendered by Judge Mitchell. Of course, it is unnecessary to say to the gentlemen of this commission that Judge Mitchell is universally regarded as one of the greatest judges not only in the State of Minnesota, but in the United States. His opinions are more often quoted in the most distant jurisdictions.

Mr. POWELL. The fact that he started Mr. Tawney in law goes far to support that.

Mr. STEENERSON. Yes; I am free to admit that if it had not been for the early association with Judge Mitchell my former colleague in the House of Representatives would not have been as great a man as he is. I will further say that I have had the pleasure of arguing cases before Judge Mitchell of considerable importance, and I learned to admire him greatly.

Mr. MAGRATH. I do not know how you reach that level of 1,057 as being the high-water mark under natural conditions.

Mr. STEENERSON. That is the high-water mark as it would be when we consider the 3 feet. The low-water mark as I show it at 1,054, but the average increase, as I will show later, was 3 feet. Of course, where there is an obstruction, it raises the lake in a similar way. That is, at point A or point B the elevation of the water would be the same as at point C or point D; and therefore we can say that the result of an artificial level would leave a watermark that would correspond all around.

Judge Mitchell in the Minnetonka case used the following language:

> "High-water mark" means what its language imports—a watermark. It is coordinate with the limit of the bed of the water; and that only is to be considered the bed which the water occupies sufficiently long and continuously to wrest it from vegetation and destroy its value for agricultural purposes. Ordinarily the slope of the banks and the character of the soil are such that the water impresses a distinct character on the soil, as well as on the vegetation. In some places, however, where the banks are low and flat, the water does not impress upon the soil any well-defined line of demarkation between the bed and the banks. In such cases the effect of the water upon vegetation must be the principal test in determining the location of high-water mark, as a line between the riparian owner and the public. It is the point up to which the presence and action of the water is so continuing as to destroy the value of the land for agricultural purposes by preventing the growth of vegetation, constituting what may be termed any ordinary agricultural crop—for example, hay.

The evidence before the commission conclusively establishes that for 28 years an artificial level has been maintained in the lake by means of obstructions at the outlet, and that for at least 20 years the line of the high-water mark as artificially raised has been at 1,060. Other evidence before the commission also, as we contend, conclusively establishes that the artificial level thus maintained has averaged at least 3 feet above the natural level, so that it follows that but for the obstructions the high-water mark would have been, as stated, at 1,057. If it had not been for the obstructions that would be the highest point reached.

The purposes for which an artificial level is recommended under the reference are, first, navigation, domestic, and sanitary purposes; second, transportation; third, fishing; fourth, power and irrigation;

and, fifth, the most advantageous use of the shores and harbors of the lake and the waters flowing into and from the lake.

We contend that for navigation, domestic and sanitary purposes, and for transportation and fishing purposes the level of 1,057 is the most advantageous. For the use of the shores and harbors and the potential water power to be created from waters flowing into the lake a still lower level would be advantageous. But for the purpose of creating power from the waters flowing out of the lake, even a higher level might be advantageous.

We contend that the normal or natural low-water mark, as it existed before there were any obstructions and as it would be without obstructions, would not exceed 1,054.

Mr. GLENN. What evidence do you rely upon for that?

Mr. STEENERSON. Mr. Berkman will point that out. In other words, that there was a variation of 3 feet between the ordinary high-water mark and the ordinary low-water mark in the state of nature.

The interests represented by the potential water powers to be developed from waters flowing into the lake, and sanitary and domestic purposes (including the use of sand beaches for summer visitors) would be subserved by a level maintained below 1,057. The interests of navigation, transportation, and fishing would be best subserved by a level of 1,057. The only interests that would be advanced by the maintenance of a level above 1,057 would be the interests represented by the development of water power from water flowing out of the lake.

The next question that arises would seem to be whether or not the interests represented by the development of power from waters flowing out of the lake are of sufficient importance to justify a recommendation for a higher level. As bearing upon that question we call attention to the undisputed facts, as appears from the evidence that such power would be developed for private manufacturing purposes mainly. It can not be contended, therefore, that the taking or damaging of any private property for the advancement of these interests would be taking it for a purely public use, as understood in the law of eminent domain in the United States, and, if that law were to be followed, then these interests would have to be entirely disregarded. But we concede that the obstructions which constitute the effectual taking or damaging of the property, being on the Canadian side, it would be reasonable that the law of eminent domain, as applied in the place where the actual obstructions exist, should be applied to the consequences of those obstructions. If the commission, therefore, should conclude that in the interest of this particular power development there could be a taking, under legislative authority, of property, provided it was entirely within Canada, then it should be conceded that the two countries in this treaty have for the purposes of this case created one entire jurisdiction, so that the law where the obstruction exists that causes the damage should be followed in determining whether the obstruction should be authorized, as well as in determining the rule of damages and compensation.

That is not a wild suggestion, because in article 6 of the treaty an illustration of this kind of reasoning is found. There you create a jurisdiction as if the river was in one country. So that in this case,

where an obstruction that causes the damage and the taking of the property is in one country and part of the property is in another, I contend that if you find it is necessary to maintain the obstructions so as to permanently take our property that we should be compenstated for it on the same principles that you would compensate for it in your own country and on the same principle as the owners of land along the Lake of the Woods in Canada would be compensated. I understand from my associate here that the rule of compensation is more liberal under that law. This would seem to indicate the only solution of the problem and the only method whereby the higher level required by these particular interests could possibly be authorized. In other words, if the obstruction and the property to be taken were both in the United States and the obstruction were being devoted to a manufacturing purpose, which, as stated by Mr. Rockwood, is not considered as purely a public purpose, authorizing the exercise of the right of eminent domain, the property could not be taken for that purpose. If the obstruction and the land to be taken were both on this side of the line, you could not condemn the property, but you could condemn it in Canada. Therefore, inasmuch as we adopt the more liberal law of eminent domain, which authorizes the taking of private property when the legislature thinks wise, even to advance a private purpose—but in consideration of that, as I stated when Mr. Rockwood was arguing, they adopted a more liberal rule of compensation—in that case we, having substantially taken the property already in adjusting the compensation, should follow that doctrine. That is no violation of our laws, because of the damage being beyond our jurisdiction. We submit that it is true, as argued by Mr. Rockwood, that there is no authority under the laws of the United States for the exercise of the power of eminent domain to take or damage private property for that purpose.

Mr. TAWNEY. Applying the rule that you have just now cited, with your knowledge of the value of the lands that are submerged by the increased level of the Lake of the Woods, what would you say would be the reasonable compensation for or reasonable value of those lands?

Mr. STEENERSON. I understand that one of the rules of compensation referred to is that it is what the property is worth to the owner. The market value is a matter where there is a buyer. I would not want to farm up there for 5 cents an acre; I have no use for it.

Mr. TAWNEY. Not even for celery purposes?

Mr. STEENERSON. No. Still, to the man who owns that farm, if you please, for celery purposes it is worth a thousand dollars an acre.

Mr. MIGNAULT. Mr. Steenerson, supposing you were called as an expert—because I concede you know the land very well—to give an opinion in condemnation proceedings as to the value of the land, what valuation would you put on it?

Mr. STEENERSON. Condemnation proceedings in the United States or in the State of Minnesota?

Mr. MIGNAULT. Well, in the United States. Supposing it was satisfactory to the power interests to have this land condemned, say, up to 1,063, which is, I believe, the highest level suggested; what would you say is the value of the land? If this comes down to a matter of dollars and cents—I do not say that we will take that

view—but supposing we considered it was a matter for compensation, what figure would you suggest as being a fair figure?

Mr. STEENERSON. You are asking me now what my opinion of the value would be?

Mr. MIGNAULT. Yes; from your knowledge of the land.

Mr. STEENERSON. I do not think for one minute that cultivated farms there are worth less than $100 an acre.

Mr. MIGNAULT. Taking the rest of the land, what do you suggest?

Mr. STEENERSON. I would take the opinion of Mr. Ralph, for instance. I have known him for 30 years. He surveyed that land when it was absolutely a wilderness. He has seen it. He is the drainage engineer that planned many of the drainage ditches. There is no more competent judge of land in Minnesota than Mr. Ralph. He was called there to testify as to these different things and was called by the opposing interests, the water-power interests, they thereby estopping themselves from questioning the soundness of his opinion upon values. Mr. Berkman will refer to the values he put on the lands.

It appears from the evidence, and has been developed in the argument, that the water-power interests, existing or to be developed on Winnipeg River below the outlet, would be just as well subserved by a low level as by a high level, so that the level that suits domestic, sanitary, navigation, transportation, and fishing and agricultural interests, to wit, 1,057, would be perfectly satisfactory to those interests. I have already pointed out the interest that contends for the extremely high level.

In closing, I will venture to offer suggestions as to what remedy should be given these people if the commission should unfortunately authorize a higher level than would be consistent with the property rights of all of these people. I do not suppose that they will authorize any extreme level, but even a level of 1 foot above 57 would injure quite a large area, and I think my associate has figured out or calculated the area injured or destroyed or damaged by each foot of rise. I venture to make a suggestion in regard to the remedy.

I think it was Commissioner Mignault who, while the matter was considered between the commission and Mr. Rockwood while he was arguing, suggested the customary way of having a lump sum turned over to the Government whose citizens had been damaged and let them apportion it among themselves, among those who are entitled to it. That, of course, is the customary and expeditious way of doing these things. It has the advantage of being of a summary nature, and a man will not be compelled to employ counsel and go through trials. Mr. Lockwood referred to the constitution of Minnesota as a protection to our property rights and that if they were to be determined we would go through jury trials under the forms of law.

There never was a more fallacious proposition advanced. Most of this property is taken. We can not sue anybody. It is lost. It is simply a matter of conscience that they should be compensated, and I can not for one instant imagine why the suggestion was made by Mr. Rockwood. I practiced law for 25 years in northern Minnesota, and I tried a good many cases against lumber companies, railroad companies, and dam companies, and mills, and I know that for one of

these settlers owning 160 acres, or perhaps a few acres, to undertake to bring suit against any of Mr. Rockwood's clients, or any other person or corporation represented by so able and skillful a lawyer is absolutely impossible as an economic proposition. It is worse than throwing your money away. Why, I understand—I do not know how true this is—that Mr. Samuelson here——

Mr. ROCKWOOD. You are speaking of your clients?

Mr. STEENERSON. I am not speaking about my clients. I think I can show by the records of the State of Minnesota that the trial judge was induced to grant a new trial right in the face of the decision of the supreme court and delay the result for a year; but we got our money, as you know, after a long trial. I understand that Mr. Samuelson, as an illustration, has 40 suits pending against this very corporation. There is one or more of them pending in the United States court for an injunction. Why, the moss will be growing over those papers before that injunction suit is ever decided. And these men have a vain hope that after all the fine constitutional questions have been decided, with which Mr. Rockwood is so familiar, as to whether the damages shall be from year to year or whether they shall be a gross sum, as an injury to the farmer, will be a permanent compensation. I remember one case that went to the Supreme Court of Minnesota, where a farmer sought to recover and where the judge was not very clear on that point, whether the obstruction of the dam was a permanent injury to the farmer or whether it was a continuing damage; and having not been clear to the jury, the case was reversed, and the farmer had to pay $400 or $500 for printing a volume as big as a Bible. So I understand that one of the cases against Mr. Rockwood's clients, represented by Mr. Samuelson, was brought before the trial court, but the questions of law were so extremely difficult that the judge was persuaded to decide the case against the plaintiff, or directed a verdict for the corporation, because he said the plaintiff could take it up to the supreme court and the law could be established.

You can see what a beautiful result would follow if this commission should refer us to damage cases in the courts. The lawyers would take half of it, at least.

Mr. TAWNEY. On a 50–50 basis?

Mr. STEENERSON. Due to some moral sense, I have never known them to exceed 50 per cent—and I used to be one of them. I do not know why they were limited to that, because the necessities would induce them sometimes to get as much as 75 or 90 or 95 per cent.

Mr. TAWNEY. Whose necessities are the greater, the farmers' or the lawyers'?

Mr. STEENERSON. That is a question that I can not determine. I merely concur in the suggestion of Commissioner Mignault that the remedy for these people, who, some of them, for 20 or more years have been deprived of the property, should be that whatever they get should be given to the State Department so that it may be turned over without any great diminution in quantity.

Mr. TAWNEY. Just one word in that connection before you leave. You have had considerable experience in the legislative department of the Government. What do you say is the best way in which to bring about the final adjustment and settlement of the damages—whether by legislation, by treaty between Great Britain and the United States, or by protocol?

Mr. STEENERSON. Without having time to consider the proposition, I do not feel able to state it.

Mr. TAWNEY. I have given a great deal of consideration to it, and in the light of my experience in the legislative department of the Government it occurred to me that possibly there would be less delay if it could be done by negotiations and settlement between the two countries under the treaty-making power rather than under the legislative departments.

Mr. STEENERSON. As I have already indicated, any solution that will give these people expeditious relief is worth more than one that is delayed.

Mr. TAWNEY. I just wanted to get your judgment on that before you left.

Mr. MIGNAULT. Mr. Steenerson, you consider, I take it, that it would be the practical way of distributing the compensation to hand it over to the Government to be distributed between these people for settlement?

Mr. STEENERSON. They have facilities for doing so.

Mr. MIGNAULT. I would certainly prefer that mode rather than to leave it to action in the courts.

Mr. STEENERSON. I want to thank the commission for giving me this opportunity to be heard.

ARGUMENT OF MR. C. E. BERKMAN.

Mr. BERKMAN. Mr. Chairman and gentlemen of the commission, it is with diffidence that I follow the numerous able and learned counselors for the power companies, who have so ably discussed their side of this great controversy.

Then that I must immediately follow our eminent Congressman, who has so eloquently and logically outlined our case in the interest of domestic and sanitary purposes, for navigation and transportation purposes, the most advantageous use of the shores and harbors of the lake, the fishing interests, and the potential power of the waters flowing into the lake. Before I begin my argument on the question of ordinary high-water mark, I will state my position in that regard.

It is our claim that under the laws of the State of Minnesota (and of the United States) the riparian owner owns the shore to low-water mark, subject only to the right of the State or of the United States Government to raise the level of the waters to ordinary high-water mark without compensation for any lands taken between those points, when this raise of waters is shown to be necessary in the interests of navigation and for this purpose alone. We may and do concede in this case that the interest of navigation demands and would justify the raising of the level of the Lake of the Woods to ordinary high-water mark of 1,057. The question of what is ordinary high-water mark in this case then becomes of great importance, since damages to riparian owners begin when that point is exceeded for purposes of public use. We do not concede that if wide variations in draft are to be maintained that it is such a public use under the evidence and the law affecting this community of riparian owners that they can be called upon to contribute without compensation. [Quoting:]

THE TITLES OF RIPARIAN OWNERS.

(Discussed by Eugene Allen Gilmore in a brief on The Scope of Riparian Rights, p. 45.)

Whatever incidents and rights attach to the ownership of property conveyed by the United States, bordering on navigable streams, will be determined by the State in which it is situated.

Grants by the United States of its public lands bounded on streams and other waters are to be construed as to their effect according to the law of the State in which the lands lie. Barney *v.* Keokuk, 140 U. S., 337, 338; Packer *v.* Bird, 137 U. S., 661, 671; Hardin *v.* Jordan, 140 U. S., 371, 384; Kaukauna W. P. Co. *v.* B. B. & M. Canal Co., 142 U. S., 524; Eldridge *v.* Trezevant, 160 U. S., 466.) By the terms of admission of the States formed from the Northwest Territory the Federal Government retained the right to dispose of the public lands within such territory after it was incorporated in the State. In the Federal land patents covering land bordering on navigable water the title which the patentee obtains from the Federal Government does not extend beyond the meander line run by the Government surveyors. What title or right the patentee gets to the submerged land beyond the meander line has been left to the determination of the respective States in which the land lies. Acting under this power to determine the rights of patentee beyond the meander line the majority of the States in this country have declared the title to the submerged soil to be in the patentee. If, for example, a case comes into the Federal courts concerning submerged land in Iowa, the Federal courts will follow the law of Iowa to the effect that the title is in the public; on the other hand, if a case arises affecting land in Wisconsin, the court will follow the law of Wisconsin to the effect that the title is in the riparian proprietor.

In 31 Minn., page 297:

"It is the well-settled law in this State that a riparian owner upon a navigable stream has the fee to low-water mark * * * subordinate only to the paramount public right of navigation. These riparian rights are property, and can not be taken away by the State without paying just compensation therefor."

In 23 Minnesota, page 114, Brisbine *v.* St. Paul Railroad et al.:

"The owner of a piece of land bordering upon the Mississippi River, purchased from the United States, and comprising a block of land in a city and a narrow strip between such block and the river, continues to be a riparian owner, though such strip has been a public street by a common-law dedication; end, even after he has conveyed such block, describing in its deed as extending to the street, he continues to be a riparian proprietor in respect of his ownership of the fee of that one-half of the street between the center thereof and the river. As such riparian proprietor he holds the fee to low-water mark, subject to th public easement of navigation, and with all the rights of other riparian owners as detailed in the opinion; and he is entitled to compensation in respect of these rights from a railroad company that seeks to condemn for the purposes of its railway the land between the center of the street and the middle of the river."

In 24 English and American Enc., page 981:

"According to the weight of authority, riparian rights are property of which the owner can not be deprived even for a public use except by due process of law and upon just compensation for rights lost by reason of improvements made for the purpose of aiding navigation.

"Citing many cases, among them 93 Wis., 534, which holds that even for public health that it is not such an interest of the public that property of riparian owners can be taken without compensation."

ORDINARY HIGH-WATER MARK.

Ordinary high-water mark on the Lake of the Woods is a matter which is of vital interest to riparian owners. Since the lake levels have not been in a state of nature for 28 years we lack the usual data for determining just where that line should be located to the satisfaction of diverse interests.

The engineers have selected 21 years out of the past 23 years and they have, by taking four months out of each year of the 21 years, made a calculation which places the ordinary level of the lake, in a state of nature, at 1,059. It might not be out of place to suggest that if the levels prevailing during the two years last past had been included in their calculations it would have made some change in the per cent of time, which change would be of advantage to riparian owners, because the levels, in a state of nature, during the two years last past would not have exceeded 1,057 at the highest stage of water during those years.

If a longer period had been used by the engineers, say 34 years last past instead of 21 years, the result would be still more favorable to riparian owners.

During the past 34 years the mean level would have been below 1,057 approximately 73 per cent of the time, and would have been above 1,057 approximately 26 per cent of the time. There can be no objection on the part of any one that a liberal construction should be placed on the data available in favor of riparian owners, since it is suggested that they are to contribute their property rights from low-water mark to the ordinary high-water mark without compensation; that is, in the interests of navigation.

If we consider the 34 years last past and the data referring to that period, it is evident that ordinary high-water mark can not be placed any higher than 1,057, and they would, upon that basis of calculation, be entitled to compensation for damages caused by water held at a higher stage or level.

It is in evidence that during the 21 years upon which the engineers make their calculations the actual level prevailed above 1,058.3 eighty per cent of the time and that it was below 1,060.9 eighty per cent of the time.

We would like to have you compare this with a computed level for the past 23 years, where the computed level would have been about 1,055.3 eighty per cent of the time and would have been below 1,057.5 eighty per cent of the time. You will notice that there is a difference of 3 feet on that plan of averages between actual levels and the computed levels for the last 23 years.

Referring to the fact that the level of the Lake of the Woods has averaged about 3 feet above its natural level for the past 28 years, it follows, as a necessary consequence, that the waters of the lake have had the natural effect of changing the nature and character of the grasses and pastures of the shore lands so that an examination readily shows what the ordinary high-water mark now is. And there is a competent evidence before the commission to support a finding that the actual existing conditions place that ordinary high-water mark at 1,060 (Mr. Meyers, top of page 461, Winnipeg hearing), as shown by grass and pasture lands, such as are referred to in the Minnetonka decision.

If the fact that the actual conditions existing for 28 years have so affected pasture and meadow lands that an examination places the ordinary high-water mark at 1,060 and that for this period averaged 3 feet above its natural level, it would seem to be a sound conclusion that if the lake had been in a state of nature during that time the indication of high-water mark before referred to would be found at about 1,057 instead of 1,060.

It seems to be the law that for the purpose of aiding navigation the riparian owner must contribute, under the doctrine of "damages without legal remedy," from low-water mark to ordinary high-water mark in case the State desires to aid navigation and it is shown that there is necessity for such aid.

The evidence before the commission indicates that with a sufficient discharge capacity at the outlet of the Lake of the Woods, that in aid of navigation the lake could be maintained at a constant level for the greater portion of the time and there would not need to be over a foot variation in lake levels, and the balance of the time it would only be affected by excessive precipitation. The evidence on the part of the American navigation interests indicates that an ordinary maximum of 1,057 would be the most satisfactory to those interests.

There has been an effort made to show that the navigation interests on the north end of the lake need higher stages of water than 1,057; and, in fact, their claims are even as high as 1,062 by some in aid of navigation, which is 12 feet higher than the stage of water which existed in the eighties. It is evident that during the period from 1882 to 1887 or 1888 low water existed on the Lake of the Woods, and it is also evident that the shipping interests were greater then than now, and that the promise now is that in 10 years the shipping interests will be much less.

It will be fair to state that from 1884, and for three or four years thereafter, the level of the lake prevailed at from 1,050 to 1,052, and it was during this time, or about this time, that the necessity of artificial control in lake levels during low-water periods became apparent to the navigation interests, and they petitioned the Dominion Government and made such representations that the Rollerway Dam was placed at the outlet of the lake.

This Rollerway Dam was intended to and did raise the lake level about 3 feet. Now, this seems from the evidence to be all that they asked for at that time, and it would not be out of place to assume that that was all that was necessary in aid of navigation vastly more important than now. That control, the Rollerway Dam, raised the level of the lake to about 1,055.

There is some evidence that a stage of water as high as 1,062 with a draft of 5 feet or 6 feet would be a proper stage for navigation and power purposes. It is apparent that this is merely a subterfuge upon which effort is made to tack a private use to a public use so as to secure lands without compensation up to high-water mark and to condemn under the guise of public use in the interests of navigation.

But if other interests than those of navigation need, as they insist, a range of 6 or 7 feet in draft, it is manifestly a mistake to contend that the riparian owners must contribute where the range in draft

is manipulated wholly in the interests of power. If a constant and uniform level is not fixed and there is to be wide ranges in draft, the importance of the location of ordinary high-water mark ceases, for, under the law of the State of Minnesota, the riparian owner is entitled to compensation to low-water mark. To illustrate, if the Lake of the Woods were to be placed at a level of 1,057, and that stage is necessary for navigation interests and for the development of power, a draft of 6 feet is necessary, and it would be of sufficient importance to warrant raising the lake to provide the draft, should not the paramount beneficiaries bear the cost and the whole cost?

This is especially true in this case where there can be no so-called public use to this community of riparian owners nor to any of the citizens of this Government, and these wide ranges instead of being a public use, or of public benefit, are an evident damage in diminishing potential power at the Long Soo in the ratio of 3 to 4 to that created at the lake outlet.

It is further negatived by reason of the damage to fishing interests in the southern end of the lake where fishing privileges are invaded and made of less value.

The potential power at the Long Soo is decreased with the variations in lake levels.

It is self-evident that if the lake was navigable at all from 1883 to 1887, when the lake must have been below 1,050, that with the level raised to and maintained at an average level of 5 to 6 feet above that, there should be ample water in which to operate their ships at stages of 1,056 to 1,057 feet.

Much was made of the difficulty of towing in connection with Davys Rock, but the evidence discloses that that rock is about 150 feet from an island that the navigator passed, and in reality all that it affects navigation is that they must pass 150 feet farther from the island.

There is ample evidence to show that on the Lake of the Woods a stage of 1,057 is sufficient for all craft on the lake.

Some reference is made to shipping out of the mouth of the Big Grassy and Little Grassy Rivers, and it is evident that if in a state of nature, with the lake at 1,055.6, which would have prevailed for the past 34 years and with a basin or mouth 2 feet deep, that placing the lake at 1,062 would give ample draft for boats of large size, but there can be no claim that the drainage area is large enough to justify a demand that riparian owners over so large an area be asked to contribute for so insignificant a purpose. Then it would be preferable that smaller craft be used and that artificial improvements, by way of dredging, be constructed.

Since there is ample water in the lake at 1,056–1,057 for all shipping, it is unreasonable to ask that the waters of the lake be raised so that the towing of logs can be conducted over islands and reefs that are submerged.

It may not be conceded that navigation interests are to be so nursed that lake levels must be raised, so that the towing of logs may be conducted in still waters. Surely general commerce is contemplated, for Mr. Stewart testified that the trouble at Falcon Island Narrows, Bishops Bay, and Davys Rock could be avoided by taking the open water.

Surely navigation on the north end of the lake can not expect more protection against wind and storms than nature affords to the people who navigate the south end of the lake.

As to the importance of navigation, there is no evidence that there are any of the deeper draft boats employed, except the *Kenora*, in any commerce except the towing of logs and timber; and so far as the *Kenora* is concerned there seems to be no claim that the importance of its freight or passenger business is large enough to warrant her operation. In order that the commission might be informed as to the importance of its business, the manager of the *Kenora* promised to furnish a statement of the freight and passenger business done, but none has ben furnished. So we can only take it that the business is small. There is no evidence that any other boat on the Lake of the Woods runs on any schedule, or that any boat or line of boats has any tariff or scale of charges, and it can only be taken that there is none.

FISHING INTERESTS.

In the consideration of the fishing interests the evidence discloses that high stages of water are detrimental to those interests, in so far as the fishing in American waters is concerned.

High water affects the quality of the fish product, and it has the effect of driving the fish from the American fishing grounds. The evidence discloses that the reason for this is that the high stages of water disturbs vegetable soils and washes them into the lake, thereby making the waters unclean, with the result that fish abandon the fishing grounds.

This result has made fishing in American waters in years of high water unprofitable, and if high stages are to prevail, the chances are that it will wholly destroy the American fishing interests in the Lake of the Woods. In the Canadian fishing grounds conditions seem to improve with high stages of water, because the evidence discloses that their catches are larger these years. But that may be due to the fact that fish from the American side of the lake spend their summers there when unclean conditions prevail.

The fishing industry is one of the industries on the Lake of the Woods which would be damaged by wide variation in lake levels, because the nets and equipment used would need to be changed in order to fit the stage of water prevailing. And it must be admitted that constant levels would be of great advantage to fishing interests in the saving of equipment, to say nothing of the advantage American waters would gain with a lake stage of 1,056.5 to 1,057 for the greater portion of the time.

It may be urged that in case high levels are fixed for the lake conditions will so adjust themselves that the lake will further push back the soil and vegetation and make new banks. This position might well be taken if the level of the lake was to be kept constant, for then the formation of ice and its breaking up in the spring would push back the banks and create new ones at higher levels, so that in time the problem of dirty water would cure itself. But with the filling in of the lake in the summer so that it will go into winter storage full, and with the drawing off of the water in winter, when the break-up comes in the spring, the water will not be high

enough to have any effect which will improve shore conditions by pushing back the vegetable soil by the action of the ice.

If Mr. Marschalk were to hang up his fishing equipment and wait for conditions to change for the better, it might be rotted before again required for use. It would be doubtful if his grandchildren would live to see new banks, if lake variations of 6 or 7 feet were permitted. The great importance of fishing in its relation to the stages of water is to be seriously considered because of the difficulty of arriving at the question of damages sustained. As a matter of fact, I can not see how such damages might be equitably adjusted.

We are unfortunate in having existing tariff walls between this country and Canada, and in case the fish are driven to the Canadian side of the lake and there caught, we must, if they are shipped back in boxes for use, pay the usual duties, whatever they may be.

It is patent that if high levels are to prevail on the Lake of the Woods that the conditions around it on the Minnesota side of the lake would be so uninviting that the usual attractions of lakes and bodies of water would be entirely dissipated. On this subject the navigators at Kenora and the citizens of Minnesota were directly opposed. And since the owners and occupants of resort properties were heard at Winnipeg the preponderance of evidence seems to be in favor of and support the contention that sand beaches are of an immense community value.

Calling your attention to the importance which they place on sand beaches, upon property which they occupy only on an average one-sixth of a year, the general health and sanitary conditions are not affected so far as their property is concerned. Kindly compare this with the condition that is created in American property interests by high stages of water.

All that the Canadian summer resorter loses is the sand beaches, and they have higher stages of water prevailing on abrupt shore lines, while the citizens of the United States lose their sand beaches entirely by high stages of water, and in addition they have created for them one of the greatest curses that nature can inflict on a community; that of an impassible swamp between the lake and property owners who would live above any fixed stage. The citizens of Canada and around the north end of the lake, even though they had the advantage of sand beaches, which might be lost, they would still have easy access to the lake, while in the United States those citizens who have lands in the vicinity not flooded are deprived of access to the lake by reason of the impassible swamps created by high stages of water, a right which belongs, under the law, to the public for boating, fishing, etc., and those other advantages, social and otherwise, that go to a community bordering on lakes. Public health, welfare, and commerce is involved.

The matter of power is of interest to the citizens of Minnesota in that their interests would be best preserved if the lake levels would be so regulated that the potential power at Long Soo Rapids would be capable of its maximum development; and there is also the potential power that might be developed from the Rapid River.

There can be no contention that the power that may be developed at the outlet of the Lake of the Woods can be of any use to these riparian owners, since the whole of the development at that point

would be used for the manufacture of flour and the making of paper.

The benefits to power plants on the Winnipeg River must for many years be small. In fact it is patent that it will be many years before hydroelectric development and the demand for such use will be large enough so that it will benefit those interests to have storage on the Lake of the Woods. The demand by these interests at this time for wide variations in lake levels is simply looking into the future and asking that something be done at this time so that when the demand is large enough to use up the power that a constant level would give, then they would have additional storage to draw from to carry their peak load. They would appropriate lands at present prices for a purpose to benefit by that appropriation in the remote future.

I do not recall that there is any evidence to show that the plants controlled by the electric railway of Winnipeg are under Government control as to the use and sale of its power. It has been suggested that some of the available power sites on that river might electrify one of the railways of Canada and in such case it is plain that such development would not be a public use, but would be a private use, and there is no evidence that the balance of the available power sites would not pass into private control as to the use or sale of the power development or the product of its development.

If I am not mistaken, there is the further objection to the proposition that lands in Minnesota may be condemned to aid in the development of power in Canada for the reason that the tariff duties imposed by the Dominion Government would necessarily place the users of the products of such development on unequal terms, namely, an export duty on electricity. Public use and the doctrine of eminent domain, in so far as it applies to the riparian owner on the Lake of the Woods in connection with different stages of water and the contemplated drafts urged by the power companies, is a matter of vital importance to every one interested.

Mr. GLENN. When has it been as low as 1,050?

Mr. BERKMAN. It was that low in the eighties. It was that low at the time the power and navigation interests of Canada petitioned the Canadian Government for the Rollerway Dam, or what resulted in the Rollerway Dam.

Mr. TAWNEY. Did that require dredging Warroad Harbor to the extent of 7 feet?

Mr. BERKMAN. Yes.

Mr. TAWNEY. I understood you to say that 1,050 was the low-water mark in the eighties?

Mr. BERKMAN. Yes; 1,050 in the eighties.

Mr. TAWNEY. If that were adopted now that would necessitate dredging Warroad Harbor to the extent of about 7 feet, would it not?

Mr. BERKMAN. In answer to that I would say that it would necessitate dredging Warroad Harbor, I think, 4 feet; but in that connection I say that while we are willing to concede from 1,050, which is the low-water mark in the eighties, to 1,056 or 1,057, I think it is plausible and fair to concede that possibly in the interests of navigation we need a constant level.

Mr. POWELL. What do you mean by low water?

Mr. BERKMAN. The low water which existed in the eighties.

Mr. POWELL. When? What time of the year? I do not know whether you have thought of it, but the term "low water" is a perfectly meaningless expression in respect to fresh water. Low water means the time of the turn of the tide from ebb to flow. High water means the time of the turn of the tide from flow to ebb. Where do you get your standard of comparison? You are using the words "high water" and "low water," what is your standard of comparison? To my mind low water means average water and high water means average water, unless you adopt some definition like Judge Mitchell has done, and use nothing else. If you are talking about means——

Mr. BERKMAN (interposing). I am not talking about means.

Mr. POWELL. When it is low?

Mr. BERKMAN. It is in the evidence.

Mr. POWELL. It is low with respect to what?

Mr. BERKMAN. It is low, with respect to the time at which it was low, and continued low for a year or two.

Mr. POWELL. Now, you are getting a mean of low water. What are you taking as your two extremes for low water from which you deduce your means?

Mr. BERKMAN. I do not know that I understand you. Probably I do not know the answer.

Mr. POWELL. The water reaches a height of 1,060, or has reached a height of 1,063, I believe. That is low water that day and it is high water that day. It might come down as low as 1,050. That is high water that day and it is low water. At what stage are you going to draw your line of demarcation between the high and the low, so we can tell what is low and what is high? What is the lowest I know, but what is low I do not know.

Mr. BERKMAN. We know what the evidence of the engineers is, and we can calculate it from the precipitation records.

Mr. POWELL. No; that is not a matter of precipitation. When would you say they had low water and when would you say they had high water? At what particular stage of lake level would you say it was becoming low, and, above that, would be high? Do you understand me?

Mr. BERKMAN. I do not know whether, if I do understand you, that I can answer you.

Mr. POWELL. Scientifically speaking, apart from that arbitrary rule which it laid down by Judge Mitchell, high water and low water mean practically the same, but highest and lowest are entirely different things. The engineers have struck the mean of the waters, and below that they call low water and above that they call high water.

Mr. WHITE. That is correct.

Mr. POWELL. What do you mean by high water and what do you mean by low water? They mean the same thing; they coincide exactly.

Mr. GLENN. The question I want to clear up in my mind is that you said before the building of the dam that high water was 1,057. Where is your evidence of that? I remember asking Mr. Myer—I do not know whether I asked Mr. White or not—I remember asking Mr. Myer the question if he had any old records, or anything of that sort, prior to the building of that dam, that fix the high-water mark,

and he said "no"; he could not find any. You keep referring in your argument to the fact that prior to the building of this dam the high-water mark was 1,057. What is your evidence that it was 1,057?

Mr. BERKMAN. The evidence for that is the evidence drawn from the reports of the engineers. The engineers report that the lake has been under a state of artificial control and has been kept on average of 3 feet above its natural level for a period of 28 years. The engineers further state that the ordinary high-water mark, as defined by Judge Mitchell in the Minnetonka case, is at 1,060. That is on grass and pasture lands.

Mr. KEEFER. My learned friend is under a misapprehension when he says that. However, I do not want to interrupt you. I merely want to call your attention to the fact that the engineers found the high-water mark well above 702 of the Warroad gauge.

Mr. BERKMAN. The consulting engineers——

Mr. KEEFER. I am not speaking of the consulting engineers.

Mr. BERKMAN. If these things are going to be gone into, I will have to reserve the right to discuss them further. Under the legislative enactments of Canada probably you can not go in behind to ascertain what the reasons for the engineers are, but in the United States, in construing anything, you have the right to get into it. And so far as that remark by those engineers is concerned, there was some little wirepulling in order to get the appropriation started for development at Warroad.

Mr. GLENN. I did not want to bother you in any way, Mr. Berkman. I only wanted to know the evidence you relied upon to show those figures.

Mr. BERKMAN. Did I clear it up?

Mr. GLENN. I think I see where you are arguing from—that you say now it was 60, and it was kept at 3 feet above, and therefore you deduct that 3 feet from 1,060 and make it 1,057. That is the sense of your argument?

Mr. BERKMAN. We base our argument on that.

Mr. CAMPBELL. May I ask Mr. Berkman a question?

I understood you to say that the prevailing low-water stage in the early eighties was 1,050?

Mr. BERKMAN. One thousand and fifty to one thousand and fifty-two, along in the years 1880, 1883, 1884, and 1885.

Mr. CAMPBELL. Can you give me a reference to that?

Mr. BERKMAN. The reference to that is the precipitation records or graph of the engineers that I sought to have introduced in evidence at Winnipeg, and the engineers said they would make them an exhibit and attach them and make them a part of the plates, making it plate number—I have forgotten the number, but it is the precipitation records or graph of the Lake of the Woods.

It would, I think, be safe to state that the riparian owners would not complain if the level of the lake were placed 7 feet above low-water mark, such as prevailed in the eighties, and under the right of the public to take for navigation interests they would be contributing 5 or 6 feet above low-water mark, or to 1,056–1,057, and this is in reality enough water to float the Kenora and all other boats, if there is any water at all when low stages of water prevail.

Mr. POWELL. What is that low-water mark?

Mr. BERKMAN. That is the low-water mark as testified to by Mr. Meyer. That is the best explanation I can make of it.

Mr. POWELL. What do you mean by that?

Mr. BERKMAN. Well, it is that stage of water that prevailed about the time that they found a necessity for putting in the Rollerway Dam——

Mr. POWELL. You call it the low water?

Mr. TAWNEY. He means the lowest.

Mr. SAMUELSON. Would that be the ordinary high-water mark that prevailed at that time?

Mr. BERKMAN. Perhaps it would. The term has been used, and I simply adopted it.

Mr. POWELL. It is the ordinary level of the lake at that time?

Mr. BERKMAN. That is exactly what we mean.

Mr. MIGNAULT. One thousand and fifty-two?

Mr. BERKMAN. Yes.

Mr. MIGNAULT. I would like to get the record references for that; it is new to me.

Mr. SAMUELSON. Mr. White stated that those references are on the plats that have been prepared by the engineers of the commission; that those plats have already been prepared but are not yet printed. The engineers took it and said they would put it into this book, so we would have it for reference at the time of the final argument.

Mr. MIGNAULT. I would like to have it and see it.

Mr. ROCKWOOD. Where is it now?

Mr. TAWNEY. Mr. Meyer, have you any recollection of having a graph for Lake of the Woods that shows the ordinary low water in 1880?

Mr. BERKMAN. The precipitation?

Mr. MEYER. Yes; I have a graph there, and that graph is being incorporated in the final report of the engineers. The plates have already been made; I have the proofs.

Mr. TAWNEY. It shows merely the precipitation?

Mr. MEYER. Yes, sir.

Mr. POWELL. Does it show the low stage of the water at that time?

Mr. MEYER. No, sir; the precipitation.

Mr. GLENN. What does it show, Mr. Meyer?

Mr. MEYER. As I recall it, I think it makes a reference to the low stage, less than 1,052.9, which is the lowest point reached during 21 years. I said that the stage of extreme low water might reach a point, as I recall it, in the neighborhood of 1,050 to 1,051; that that is deduced in a general way from the relation between the precipitation records during the low period of years from 1910 to 1915, and the precipitation records during the eighties; and that that was corroborated in a way by the testimony given regarding the construction of the Rollerway Dam, in which mention is made of the number of plates, the height of the plates, the amount that projected above the water, and also the cross section of the channel at the point where this dam was constructed; that from that a deduction might be made as to the probable extreme low-water stage during these years.

Mr. POWELL. That is a horse of another color. What is the use of continuing longer on that? We all understand what that means.

Mr. BERKMAN. I thought I had a reference to it here; in the meantime I will find it and submit it. There is testimony here in that regard.

(See top of p. 323, Winnipeg hearing, Mr. Meyer's comment, on low levels, and on testimony of Mr. Mather.)

I might call at this time the attention of the commission to Mr. Meyer's testimony with reference to Warroad River as evidence of low stages to which Mr. Meyer testified at the first hearing at Warroad. (P. 181, hearing, 1912.)

Mr. MIGNAULT. Under a state of nature I think the evidence shows that there was a variation of approximately 10 feet between what might be called low stages and high stages. There were certain marks on the Lake of the Woods indicating the extreme high water. Deducting, say, 10 feet from that, you would arrive at approximately 1,052 as being an extreme low stage.

Mr. ANDERSON. If extreme low water was at any time 1,050, the variation would be 12 or more, because the evidence is that extreme high water was 1,062.8 or 1,062.9.

Mr. BERKMAN. So that that would support, probably, the contention——

Mr. ANDERSON. I would not think that it would.

Mr. MIGNAULT. I am just suggesting that possibly the extreme low stages went as low as that.

Mr. CAMPBELL. I do not know whether a fresh-water lake is like a salt-water lake, but unless they measure accurately we discount what they say a good deal.

Mr. BERKMAN. The evidence shows that the stage 1,057 referred to is amply sufficient for American navigation interests and if the lake were kept at a constant level of 1,057 it would be warranted by the evidence, and all navigation interests would be cared for.

The fact of the matter is that the boat *Kenora* made regular trips when the lake actually prevailed at 1,057, and there was no hardship to the owners except the lack of passengers and freight, according to the evidence. Let us here consider the case upon which the Minnetonka case is based (28 Minn., 534). Let us consider the definition of public use, for it is a public use that is necessary to support any petition for the appropriation of private property by any other means than by a direct purchase. If any stage above 1,057 is to be considered, the right to condemn under the laws of the United States and of the State of Minnesota are of importance, and in relation to public use we cite 15 Cyc., N. S., 583; also Allen *v.* Inhabitants of Joy (60 Me., 124; 11 Am. Rep., 165).

Although it has been held that the test of a public use is whether the use will confer any great public benefit or be of any interest or advantage to the public, by the weight of authority it is also essential to constitute a public use that the general public be to some extent entitled to control the property appropriated, or to have the right to a fixed and definite use of it, not as a mere matter of favor or by permission of the owner, but as a matter of right. It is not essential, however, that all the members of the community have the same degree of interest in the use; it is sufficient that the general public, or any considerable portion thereof, have a right to the use.

Allen *v.* Inhabitants of Joy (60 Me., 124; 11 Am. Rep., 165). To constitute a public use in Constitution, Article I, section 8, that will justify the taking of

private property under the Constitution, it is not essential that all parties of the community should derive equal benefit from the purpose for which the property is taken. It may be taken though only portions of the community are thereby benefited.

DAMS FOR MILLS AND WATER POWERS.

In earlier times, when steam as a motive power was unknown and capital was small, the erection of dams and the flowage of lands for mill purposes and to create water power was considered to be for a public use, and the acts authorizing them were assumed to be valid. Although these reasons no longer exist, such acts are in many jurisdistions now upheld for any kind of mills, either on the ground that such mills are a great public benefit or on the ground of authority or long acquiescence and usage, although their constitutionality is seriously questioned.

In some jurisdictions, however, these acts have been held unconstitutional, except in cases of strictly public mills.

These statutes originated particularly in reference to gristmills, as they were in many States regulated by statute and compelled by law to serve the public for stipulated toll.

In this connection it will be observed that no claim can be made that the interest of the citizens of Minnesota or the United States can be served, because their acts are wholly outside of the jurisdiction of our legislative or judicial powers, and it will be impossible to invoke the law of eminent domain because of these facts. (Weaver *v.* Miss. & Rum River Boom Co., 28 Minn, 534; 11 NW., 114.)

Judge Mitchell says:

> No principle is more fully implanted in American constitutional law than that private property shall not be taken for public use without compensation; and, in view of the fact that the Government is granting so much of its prerogative franchise to private of quasi public corporations, in theory for public purposes, but often practically in part for private benefit, the exercise of which involves injury to or the taking of private property, there is no constitutional guaranty that requires to be more zealously guarded against encroachment than the one referred to.

The State itself can not take private property for a public use without making compensation therefor, and consequently can not grant such power to anyone else. It can not do so under the plea of improving the navigation of a public river any more than any other public purpose.

Riparian owners upon a public watercourse did not acquire and do not hold their property burdened by any such reservation or implied right on the part of the State.

Undoubtedly, like every other person, they hold their property subject to the right of the State to take it by paying for it whenever it becomes necessary for a public purpose, and it must rest in the wisdom of the legislature when such necessity exists.

Mr. GLENN. Here is that quotation you want, Mr. Campbell, on page 323:

> Our computations and records indicate that within the last 21 years the extreme low-water mark was slightly less than 1,053. The precipitation records indicate that in the eighties, possibly 1885, 1886, or 1887, the low water was less than during the last 21 years; that is, less than 1,053. So that extreme low-water mark on the Lake of the Woods may be considered as lying somewhere in the neighborhood of 1,050 or 1,051, possibly 1,051.5, indicating a total extreme fluctuation of something over 10 feet in the state of nature.

Mr. CAMPBELL. It was the expression, "low water of the eighties," indicating that nothing was going on in all that time in some kind of way, which would have been impossible.

Mr. BERKMAN. A serious interruption to the common and necessary use of property may be equivalent to the taking of it, and that, under the constitutional provisions referred to, it is not necessary that the property should be absolutely taken and possession directly assumed. (Citing Angel I on Watercourses, sec. 465a.)

It has been again and again decided to be the doctrine that overflowing land by backing water on it from dams built below constitutes a taking within the meaning of the Constitution.

Mr. POWELL. The point of this, as I understand it, is this, that if we are awarding damages we must go down to the lowest level?

Mr. BERKMAN. No.

Mr. POWELL. What is the purpose of your argument, then?

Mr. BERKMAN. That is not my purpose.

Mr. POWELL. What is the purpose of your argument?

Mr. BERKMAN. The purpose in regard to the low water is that we are contributing above low-water mark at least 6 feet—5 or 6 feet—in the interests of navigation. The *Kenora* draws, I think, 6½ feet, and the proposition is this, and it is not necessary, if that be true, that the riparian owners contribute any further or any higher in the interests of navigation than 1,057.

Mr. POWELL. That simply means this, that you only want pay for everything over 1,057?

Mr. BERKMAN. That is the proposition.

Mr. POWELL. The ranges, then, of the ground that you want pay for are the amounts between 1,057 and the point we fix as the highest level. That is what it comes to.

Mr. BERKMAN. It comes to practically that. Compensation for all damages which extend higher than the water level.

Mr. GLENN. You want to fix a constant level at 1,057, but if it goes above that you want pay for it?

Mr. BERKMAN. We want them to pay for it if they have a constant level or not above that stage, namely, 1,057.

Mr. POWELL. The difference between you is that the lower limit for which remuneration should be awarded is 1,060, or somewhere along there, and you say is 1,057?

Mr. BERKMAN. The engineers have said——

Mr. POWELL. Never mind what the engineers said; I want to get what your contention is.

Mr. BERKMAN. Yes; those are the contentions. However, since we have again referred to it, if the lake is raised and you put on wide variations in lake levels, I do not know that the riparian owners should contribute to 1,057, necessarily, because at certain times if they have wide ranges the lake may go below that.

Mr. POWELL. You better not rest much of your argument on that, because in old times the range of levels was much greater than it is to-day.

Mr. BERKMAN. I understand that, but it is a matter of public improvement, and we are willing—we think we are willing to be fair in the proposition.

Mr. Steenerson referred to the drainage act and its constitutionality.

Drainage is prima facie a public use. As a matter of law, under 87 Minnesota, State *v.* Board of County Commissioners, Polk County, citing a number of cases, page 335, at top of page—

> It has always been the law in this State that private property may not be taken for a private use, though by the constitution the legislature may authorize it to be taken for a public use upon just compensation, being first paid or secured; and it should undoubtedly appear either from the express language of the statute authorizing such an appropriation or from a fair and reasonable interpretation of the whole enactment, that the interest of public health, convenience, or welfare are intended to be promoted. * * * That the drainage of large tracts of wet and overflow will operate beneficially to the public there can be no serious doubt.

I might say that high stages above 1,057, creating a swamp or bog along the lands and between the lands higher than the level established, will create advantages against public use. It would be a public use to drain these lands but not to raise the water.

Mr. POWELL. Is it not shifting your bog from here to there, say? The bog would be on the margin of the lake, and you simply make a new bog to take the place of the old one.

Mr. BERKMAN. Not if we fix a constant level; and as I understand the purpose of this reference, if we answer "Yes," that a fixed level is for the best interests of all, why, then——

Mr. TAWNEY. As an engineering proposition, how would you maintain a fixed level?

Mr. BERKMAN. A fixed level within a certain variation.

Mr. GLENN. Do you not think that No. 1 really means that we must make some kind of a variation? It winds up by saying:

> Is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and if so, at what level?

You can not have it exactly that same level. Do you not think that it contemplates that we make a range there?

Mr. BERKMAN. I think it is necessary; but when it refers to a constant level it means as constant a level as is practicable and can be fixed.

Mr. GLENN. Do you mean by your argument that we must establish it at 1,057 or 1,060, or 1,061, and keep it right there at that one point?

Mr. BERKMAN. I mean it should be fixed at a stage of 1,057 as an ordinary maximum.

Mr. TAWNEY. Ordinary high or ordinary low maximum?

Mr. BERKMAN. Ordinary high maximum; and that once in these 24 years or 21 years, or a period of years, 5 per cent of the time that the lake may rise above that stage——

Mr. TAWNEY. How much above that would you allow?

Mr. BERKMAN. On plate 139, take, for instance, the ordinary maximum of 1,061. It would indicate that, as the consulting engineers have it under the plan showing regulated levels resulting from two methods of controlling inflow with 5-foot maximum draft. There they show that for a considerable portion of the time the lake is kept within a range of 1 foot, or up to the ordinary maximum about 55 or 60 per cent of the time; and the question was put to Mr. Meyer, found at page 315 of the testimony in the Winnipeg hearings, that by keeping the stop logs in they could keep the lake up to that stage the balance of the time, except that one year where we might find

evaporation greater than the precipitation; and it shows that the lake would go above that ordinary maximum, probably a foot or 1½ feet about 5 per cent of the time.

Mr. ROCKWOOD. May I ask Mr. Berkman a question?

Mr. TAWNEY. You may.

Mr. ROCKWOOD. Mr. Berkman, I have understood you to mean—perhaps incorrectly—that you think the power does not exist within the Constitution of the United States lawfully to fix a level, say, as high as 1,062, 4 or 5 feet above what you think is the ordinary high-water mark, and maintain——

Mr. BERKMAN. I am not going to contend that the commission, so far as our riparian owners are concerned, has no power. We are so interested in getting this thing settled——

Mr. POWELL. And you are interested in getting paid what you should be paid?

Mr. BERKMAN. We are not interested in getting paid what we should be paid, but we are interested in having this commission determine whether or not a level higher than the stage of 1,057, considering the sanitary purposes, the fishing and navigation, and those purposes, is necessary,

Mr. TAWNEY. To afford the most advantageous use of the waters.

Mr. BERKMAN. To afford the most advantageous use of the waters. If the commission finds that 1,057 or any stage below that is not the most advantageous, we do not propose to stand in the way of the commission and say that you shall not legislate, because, then, we would be back where we were before; that is, we would be no better off than we were in the past, and it is better that we get it settled. I think that explains the proposition.

Mr. TAWNEY. It does not quite answer Mr. Rockwood's question.

Mr. ROCKWOOD. I understand your answer to mean that if the commission recommends it, and the treaty or other legislation should fix a level of 1,062 or 1,063, you will only seek to get your full measure of compensation, and that you would not contest the power or validity of the legislation.

Mr. BERKMAN. Of the commission?

Mr. ROCKWOOD. Yes.

Mr. BERKMAN. Of the commission. That is, in other words, we are willing to leave this proposition to the commission, and so far as the riparian owners are concerned we do not want to test the question of the right of the commission to do these things, provided they find in their opinion that it is expedient and necessary.

Mr. TAWNEY. To afford the most advantageous use of the waters?

Mr. BERKMAN. Under the reference.

There can be no logical claim made that the community of riparian owners on the south end of the lake possibly have any benefit conferred upon it by high stages of water. It is further patent that there can be no control over the power interests benefited, exercised by the citizens of this State or this Nation, who would be called upon to give their lands and property, and since there is no benefit and no control, the first element upon which the doctrine of eminent domain rests fails to materialize.

For illustration, let us suppose that the whole watershed of the Lake of the Woods, to and including the outlet, were within the

jurisdiction of the State of Minnesota and of the United States, and the evidence was as it has been presented, the whole matter would be subject to the laws of this State. Where would we find ourselves, if they tried to connect navigation interests with power interests?

You will recall that the development at the outlet of the lake is to be used for power to run and operate a pulp and paper mill, and to furnish power for the flour mills now located there. A case of this nature was recently before the Supreme Court of Minnesota, and it was hotly contested by able lawyers of this State, who prepared briefs, and in this case (97 Minn., 429) the court said:

> When the purposes stated in the petition are part private and part public, the right to proceed must be denied.

In this case the Minnesota Canal & Power Co. had alleged in its petition that the company would build dams and canals which would aid in navigation; and that was the public use disclosed and referred to by the court. The court said further:

> But the creation of a water power and a water-power plant for the purposes of supplying water power from the wheels thereof to the public, is a private enterprise, in aid of which the power of eminent domain can not be exercised.

The development of the Norman Dam, so far as any use of it by the public is concerned, does not even have the ear marks of a public use, which this petition carried with it; for there is no evidence that there is to be any sale of power from the wheels or otherwise contemplated. As a matter of fact, the evidence discloses that all the power that can be developed there will be utilized for the paper industry and the plants already in will continue in the grinding of flour, and it is not contended that these are toll mills, and hence they, too, come under the definition of a private enterprise or private use.

It might be urged that the municipal plant at the outlet is of such a nature that it would come under the definition of a public use. But the evidence indicates that the demand for light and power purposes was fully supplied during the two years when the lake stage was at 1,057, and there is no evidence that there is any more demand for power by the municipality of Kenora now than during those two years.

Have I made myself clear, Mr. Rockwood?

Mr. ROCKWOOD. I think so. I think I understand it.

Mr. BERKMAN. There can be no logical claim made that the community of riparian owners on the south end of the lake can possibly have any benefit conferred upon it by high stages of water. It is further patent that there can be no control over the power interests benefited, exercised by the citizens of this State or this Nation, who would be called upon to give their lands and property, and since there is no benefit and no control, the first element upon which the doctrine of eminent domain rests fails to materialize.

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we find ourselves if we tried to connect navigation interests with the power interests?

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> When the purposes stated in the petition are part private and part public, the right to proceed must be denied.

I might say that Mr. Rockwood won his contention. He contended that it was not a private use and that it was not right to connect public use with water, just so as to have a tag to get in on.

In the case referred to, 97 Minnesota, the Minnesota Canal & Power Co. had alleged in its petition that the company would build dams and canals which would aid in navigation, and that was the public use disclosed and referred to by the court. The court said further:

> But the creation of a water power and a water-power plant for the purposes of supplying water power from the wheels thereof to the public, is a private enterprise, in aid of which the power of eminent domain can not be exercised.

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Again referring to the case of the Minnesota Canal & Power Co. *v.* Koochiching County (97 M., 429; 107 N. W., 405), the syllabus says:

> When the purposes stated in the petition are part public and part private, the right to proceed must be denied.
>
> But the creation of a water power and a water-power plant for the purposes of supplying water power from the wheels thereof to the public, is a private enterprise, in aid of which the power of eminent domain can not be exercised.

This applies to Kenora Dam, which is a purely private enterprise. There is nothing in the evidence that would indicate that any power development on the Winnipeg River is to be under Government control as to the price to be paid by the public for such power or its product.

There is nothing in the evidence to show that, except as to the two powers now in use on the Winnipeg River, future powers may not be established for purely private purposes.

The syllabus continues:

The generation of electricity by water power, for distribution and sale to the general public on equal terms, subject to governmental control, is a public enterprise, and property so used is devoted to public use.

Mr. ANDERSON. May I suggest at this stage that it is hardly necessary or material to follow up the right of exercising eminent domain in connection with the question of public use, in view of Mr. Berkman's statement that they do not propose to raise that question. That is, so far as they are concerned, they propose adhering to the judgment of the commission, whatever it may be.

Mr. TAWNEY. That may be true, but at the same time Mr. Berkman has prepared his argument along the lines that he deems to be proper, and I do not think it is within the power of the commission to strike any mean between relevancy and irrelevancy.

Mr. WYVELL. Or even desirable. I have listened with a good deal of interest to the argument of Mr. Berkman, which has been very carefully prepared.

Mr. ANDERSON. There is no doubt that it is a very able argument upon the question.

Mr. BERKMAN. I might say that I could have passed some of this, but the purpose is to get at the elements of the public use, because in this country a person or a party or a corporation which exercises the power of eminent domain is not excused from liability for private nuisances which it may create; but, acting under the doctrine of eminent domain, that power does excuse it from public nuisances; that is, for damage that it does to the general public.

Mr. ROCKWOOD. Mr. Chairman, I would like to make one further suggestion. I asked the question that I did of Mr. Berkman because I thought it an exceedingly important one, not only with reference to his position and the position of clients whom he represents, but with reference to every single piece of property which may not be represented here at all. It is conceivable that every property owner except one in the United States should consent to a proceeding and that that one, owning 1 acre of land, should come into the courts and say that his property is being taken without due process of law. The law is, in some respects, perhaps, on our side of the line, extremely technical. It is extremely jealous of the rights of every single property owner, and sometimes one single property owner may defeat a great enterprise simply because the legal machinery prescribed for taking his property does not meet the strict constitutional requirement.

Now, I think that these questions that Mr. Berkman suggests, or which he seems to me to suggest, must be considered with the very greatest care by this commission in any recommendation it may make, even if every single owner of property appearing could, in advance, waive his objection. As a matter of fact, he can not waive it; they are fundamental, and he can not waive them here. I think it must be very carefully considered. I was merely suggesting that Mr. Berkman's argument is strictly in point and must be very carefully considered.

Mr. TAWNEY. I want to make this suggestion for your further consideration, Mr. Rockwood. You have suggested, in your brief and in your argument, the possible and final solution of this matter by a subsequent treaty for the purpose of carrying out the conclusions and

recommendations of this commission. Suppose by the terms of that treaty a method is provided for compensation to riparian owners for lands that are submerged in consequence of the maintenance of the lake at any given level or range of levels. Would not that be a process of law, under the Constitution of the United States?

Mr. ROCKWOOD. Yes, Mr. Tawney; provided the process provides for a hearing in which he may participate for the purpose of perfecting——

Mr. TAWNEY (interposing). You can not take it, either by treaty or otherwise, without giving him an opportunity to be heard.

Mr. ROCKWOOD. And providing, further, the purpose is public in a legal sense.

Mr. TAWNEY. But that purpose would practically foreclose the citizen on that question of public use. You can not deprive him of his right to be heard, but the form of that hearing is not prescribed by the constitution, and there is a great deal of latitude allowed by the courts.

Mr. ROCKWOOD. Our courts do not accept a declaration of the legislature as to what is a public use. They make the definition for themselves. Whether in the case of a treaty, where the interests of a foreign nation are involved, the definition of a public use would be different, I do not know. I conceive that it might be. The very fact that foreign interests are involved broadens the question and might make that a public use which would be merely a private use, if only domestic interests were involved.

Mr. TAWNEY. That is, if it involved international interests.

Mr. ROCKWOOD. Yes. I think it entirely possible that that mere fact would broaden the definition of public use.

Mr. TAWNEY. In view of your suggestion, it occurred to me that this would be a good time to call attention to it, so that if you desired to amplify it further in your argument or brief we would like to hear you.

Mr. ROCKWOOD. I shall not want to take any unnecessary time, but——

Mr. POWELL (interposing). What bearing has this whole question for us? The Federal power must wrestle with this thing.

Mr. ROCKWOOD. I suspect, Mr. Commissioner, that if anything is accomplished, this commission must virtually see the thing through to legislation in the form of statutes or treaties.

Mr. POWELL. My individual opinion is this—since you brought this whole matter up for discussion—we are discussing it from beginning to end. Why would it not have been better to have applied to both Governments and made this matter one for final adjudication by this commission and thus end the whole business? We get half way; the matter comes up, then, in political arenas in both countries, and Heaven knows when it will be settled. The very best thing for all concerned to have done would have been to give this commission the power to make the final adjudication. If I were in your place, I would make application to the two Governments to have that done yet, because we have heard all the arguments, and we are in a better position now to do it probably than the two Governments will be to do it hereafter.

Mr. ROCKWOOD. I think, in substance, something exactly like that must be done at some stage.

Mr. MIGNAULT. Mr. Rockwood, perhaps you can tell me how the constitutional question can arise under the circumstances in this case. If the water is raised by reason of the maintenance of the dam at the outlet of the lake and causes this damage, how can the constitutional question come up? The only point would be to give compensation to those who suffered, but I can not conceive how any authority can prevent the elevation, for instance, of the dam within Canada producing this effect. It is not a case of expropriation or condemnation; it is a case of damage caused by an act in another country.

Mr. ROCKWOOD. Mr. Commissioner, our courts are very ingenious sometimes in finding remedies. I will suggest two possible courses of action: First, this scheme of regulation will be very partial unless it takes in Rainy Lake and its tributaries. There the lakes will lie one-half within the boundaries of the United States, and suits for abatement, for injunction, and what not, may be brought.

Mr. SAMUELSON. Where?

Mr. ROCKWOOD. They may be brought in the United States.

Mr. TAWNEY. Gentlemen, I suggest that this question is one that ought to be discussed independent of the argument of Mr. Berkman, and that he should be permitted to proceed now and complete his argument.

Mr. ROCKWOOD. I did not mean to interrupt him except to emphasize the importance of what he was saying.

Mr. TAWNEY. I think we all realize the importance. I would suggest, however, that we defer any further discussion of it until he finishes his argument.

Mr. BERKMAN. The Winnipeg River power interests have petitioned this court in the interests of power that the level of the lake be raised so that a draft of 5 or 6 feet may be annually had. There are no pleadings, but the evidence shows their needs and desires. On this showing they have wholly failed to bring themselves within the rule as stated in the case of the Minnesota Canal & Power Co. *v.* Koochiching County.

In the Minnesota Canal & Power Co. case, 97 Minnesota, page 444, the matter of the subterfuge of connecting high stages of water with wide variations in lake levels, the following appears:

> The appellant contends that the right to the waters of navigable streams and lakes can be determined only in an action to which the public is a party.
>
> The right to obstruct navigable waters has been determined in numerous cases between individuals, and it is not possible that the court should in this proceeding authorize the petitioner to do what it would restrain it from doing in another action. A proceeding to condemn land under the power of eminent domain can not be maintained unless the use to which the property is to be devoted is exclusively a public use. The mere fact that the corporation has charter authority to condemn land for both corporate and private uses will not prevent the corporation from exercising the power for the promotion of the public use only. (Lake Koen Co. *v.* Klein, 63 Kans., 484; 65 Pac., 684.) But where a proceeding is instituted in which it is sought to exercise the power to condemn property for both public and private uses indiscriminately—that is, where the purposes stated in the petition are part public and part private—the right to proceed must be denied.
>
> The principle is illustrated by Harding *v.* Goodlett (3 Yerg., Tenn., 41; 24 Am. Dec., 546).
>
> Where it is sought to condemn land for a gristmill, sawmill, and paper mill under a statute which authorized the exercise of the power of eminent domain, in aid of the building of gristmills, the statute was held constitutional, but the court said:

"The sawmill and paper mill have no public character; the erection of these mills would be wholly for the private use of these petitioners.

"Had the application been confined to the sawmill and paper mill, no one could for a moment hesitate in rejecting it. Does the introduction of the gristmill, thereby asking the land for these complicated purposes, alter the case? In my opinion the application is entitled to no more favor than if nothing was said about the gristmill.

"If an application of this sort were granted, a like application for the erection of ironworks, or any other establishment requiring water power, might be made, and would be entitled to equal favor, provided the applicant, as a pretext, were to associate a gristmill with his other works. Thus the gristmill, the only thing mentioned in the act of assembly as having any claim of a public character, would be made the subterfuge for vesting in one citizen the land of another, and of giving to the whole establishment, of which it would be an inconsiderable appendage, the high appellation of a public mill.

"This would be mocking the citizen, who would thus be despoiled of his land to enrich another. It would be holding out the idea that his land was taken for public use and that the public exigencies required it, when, in fact, this was only used as a pretext for obtaining the land for private emolument."

Then follows origin of mill-dam acts, in New England, at a time when transportation facilities were poor and the public gristmll to whch the people might resort was not only a great public benefit but also a practical necessity.

I have assumed in my argument that the evidence did not disclose that the plants on the Winnipeg River were under public control, but I am mistaken in that.

But what if we are in error in our assumption that the uses of the Winnipeg River power sites are private uses? There is still that objection that there could be no condemnation of lands to make storage reservoir, because the present demand for power would not justify condemnation for storage purposes and will not for many years.

In estimating the future demands of power—for hydroelectric power—the most optimistic power men estimated that it would be about 25 years before the demand would be enough to make full development of available power on the river necessary.

It is in evidence that the plant belonging to the city of Winnipeg has sale for only 25 per cent of the power that is at the present time available. It can not be contended that it is necessary to condemn lands on the Lake of the Woods for storage purposes in order to develop plants on the Winnipeg River at this time; and if there is no necessity, and can not be for many years, there can be no valid claim that they now have any right to condemn land at the present time, and at present values, for some contemplated use in the distant future. Such contention would be strictly against the doctrine upon which the right of condemnation is based and would violate every principle of such law.

While we are considering the matter of public use may we not summarize the public uses, rights, and privileges that would be impaired or lost to the community of riparian owners and citizens in Minnesota by high stages of water and wide ranges in lake levels, in addition to the use and benefit which would accrue from the cultivation of the fertile lands bordering on the southern shore of the lake? The damage to fishing interests will be of great magnitude; the loss of potential power at the Long Soo. The sanitary and healthful shore line of the southern part of the lake would be changed into swamps and marshes, lurking places for disease germs and breeding places for noxious insects.

Damage to lands not flooded, by rendering drainage difficult or impossible.

The destruction of sand beaches, thereby lessening the enjoyment of its use to the people.

The lands in the vicinity of the lake not riparian would be depreciated in value because of uninviting swamps created by high waters.

The added value to lands by reason of their proximity to the lake would be lost and taken away if swamps should be created which would, for a long time, deprive citizens of access to the lake.

Damage to public convenience, health, and welfare, in that the inhabitants are denied access to the lake for the purpose of fishing, boating, bathing, or other recreation, or for commerce.

If this commission should find that they have a right to condemn these lands under the powers granted to them, and on principles other than govern the laws of condemnation as laid down in Minnesota, it will necessarily open up the question as to whether the same rule as to damages will apply. There is no question but that the party who puts in motion the powers of eminent domain is responsible for any private nuisance as to property not taken directly; but the fact that it condemns under the doctrine of a public use discharges this liability to some extent and makes lawful that which would otherwise be unlawful, and, as Judge Whiting said in Hyde *v.* Minn., D. & P. Ry. Co., South Dakota (136 N. W., 92; 40 L. R. A. (N. S.), 48):

> Perchance render that not a public use which would otherwise be one.

Now, if we are removed from the public-use proposition, the one doing damage loses the possible protection from it and is liable for all damages in case that high stages of water and wide variations are to prevail. The question of consequential damages in the way of depreciation of land and property not flooded must come in for consideration, because there will be a difference in the values of such lands, and the measure of such damages will be the difference in value of the lands with the lake at 1,057, or its natural level, and its value when the lake is raised and maintained at such higher point as may be adjudged by the commission.

(Thereupon, at 5.30 o'clock p. m., the commission took a recess until 10 o'clock a. m. Thursday, April 6, 1916.)

THURSDAY, APRIL 6, 1916.

At the expiration of the recess the commission reconvened, all the members being present.

Mr. GARDNER. Mr. Berkman, if you are prepared to proceed now, we would be glad to have you do so.

Mr. BERKMAN. Now, if we are removed from the public-use proposition, the ones doing damage lose the possible protection under it and are liable for all damages in case that higher water and wide variations are to prevail on the Lake of the Woods. In the question of consequential damages by way of depreciation of lands and property not flooded or affected by way of damage or hindrance to drainage, these lands should come in for consideration, because there will be differences in the value of such properties.

In the case of drainage of lands under the general plan of assessment for benefits, lands that lie high and need no drainage are assessed to carry a part of the burden of the drainage system on the theory that if lowlands that are not profitable for cultivation are benefited there is that general benefit to the community which will cause indirectly a benefit to the lands that are not directly benefited. The wet lands improve and they carry with them a general increase in values of high-lying lands.

To illustrate, in the case under consideration, consequential damages by a hypothetical question: What is your property worth with the Lake of the Woods at a stage of 1,057, so that you have access to the lake, roads, and neighbors between you and the lake, the opportunity for the children and yourself to boat, swim, bathe, and fish on the lake, with sand beaches and sanitary conditions prevailing on the one hand and the other condition, with high stages of water and with assurance that the character of lands pictured and described by the engineers in their report will prevail always?

With acres of bog and swamp impassable, as the pictures in the text indicate, with men waist deep in the mud and water, with the mosquitoes and bull flies and other pests referred to by the engineers breeding on the most luxuriant outlay for the propagation of their kind; the total loss of neighbors between you and the lake; the conveniences of boating, swimming, bathing, and hunting and access taken from you and your family; with the disturbance of mosquitoes and bull flies to your beasts for all time—what is or would be the difference in the value of your lands under the two conditions?

In case the high levels were supported by a public use there might be a question as to whether there would be consequential damages, but if there is not benefit to the community as a whole, or even a part, then it is not only equitable, but necessary that all damages should be considered.

In Hyde *v.* Minn. D. & P. Ry. Co. (29 S. D., p. 238; 40 L. R. A. (N. S.), 48; 136 N. W., 92) Judge Whiting said:

> Not only is the question of negligence entirely foreign to the law of eminent domain, but the laws pertaining to private nuisances and to damages flowing therefrom are in no manner affected by the question of eminent domain.

It seems inconceivable that it ever could be claimed that when the State delegates to a private person or corporation the right to take or damage property under the law of eminent domain it does more than to declare that lawful which otherwise would be unlawful, perchance render that not a public nuisance which otherwise would be one, leaving he or it, in so far as the taking or damaging the property may infringe upon the superior rights of the owner, liable to compensate for all damages flowing from the injury suffered.

Yet it is stated by some courts that, by giving to a corporation the right of eminent domain for the purpose of carrying on some enterprise, such enterprise can not be held to be a private nuisance. This is clearly wrong. Any enterprise which would be a private nuisance when separated from the power of eminent domain will be exactly the same private nuisance if conducted by a person vested with the right to exercise such power of eminent domain.

For illustration, an abattoir, when located near a dwelling house, must be conceded to be a private nuisance. If by statute a party be

given the right to condemn and take or damage property to use as a site for an abattoir, such abattoir, properly conducted, would not be a private nuisance, yet if located in a residence district it would be a private nuisance. And any party injured thereby could recover damage for such private injury.

I quote from Stanton *v.* Norfolk & Carolina R. R. Co. (111 N. C., 278; 16 Southeastern Rep., 181; 17 L. R. A., 838) as follows:

> At an early period in our history some of the constitutions of the States contained no provision that private property should not be taken for public use without just compensation, but so repugnant to natural justice, as well as to the constitutional principles of the mother country was the assertion of the rights, that the courts of these States unhesitatingly pronounced against such an assumption of legislative authority. Some of them declared that it was against the fundamental principles of natural justice and equity; others rested their decision upon the ground that it was in conflict with a provision of the Federal Constitution upon the subject. (Which, however, is only a limitation upon the Federal Government.) While others reached the same conclusion upon the more satisfactory principle that it was inhibited by certain provisions of Magna Charta, which has been incorporated into their organic laws. All the States, however, except North Carolina, now contain express provisions that private property shall not be taken for public use without just compensation.

And, owing to the restricted interpretation of the word "taken" (improperly, we think, applying it exclusively to the property actually condemned), several of them have added the words "or damaged," or language of similar effect.

The cases which hold that the use of the word "taken" in constitutional provisions for compensation excludes the common law and, indeed, all other remedies for the redress of injury to adjacent property not actually condemned or purchased under circumstances where an individual would be liable, are, in our opinion, unsupported by either principle or reason. We suspect that they were influenced to a great extent by English decisions upon the statutes, which either expressly or by implication deprive the adjacent proprietor of his right to damages. The strength of such decisions is much weakened when it is considered that, while the legislation upon which they are founded may be clearly in conflict with the constitutional principles of the English Government, it is nevertheless valid because of the omnipotence of parliament, and it is therefore the duty of the court to administer the law as it is enacted. With us, however, these principles operate as limitations upon the authority of the legislature, and when it exceeds such limits its acts are invalid and of no force whatever. (Cooley Constitution Lim., 6.) It seems clear that such legislation is in conflict with the above-mentioned provision of Magna Charta, which was considered broad enough by Blackstone and other writers, not only to inhibit the mere taking of property, but also to protect the owner in its free use and enjoyment * * * without any control or diminution. The court then quoting the language of the Supreme Court of the United States (Justice Miller, in Pumpelly *v.* Green Bay and M. Canal Co., 80 U. S.; 13 Wall., 166; 20 L. ed., 557). It would be a very curious and unsatisfactory result if, in construing a provision of constitutional law always understood to have been adopted for the protection and security to the rights of the individual as against the Government, and which has received the commendation of jurists, statesmen, and commentators in placing the just principles of the common law on the subject beyond the power

of ordinary legislation to change or control them, it should be held that if the Government refrained from the absolute conversion of real property to the uses of the public, it can destroy its value entirely, can inflict irreparable and permanent injury to any extent, can, in effect, subject it to total destruction without making any compensation, because in the narrow sense of the word it is not "taken" for the public use. Such a construction would pervert the constitutional provision into a restriction upon the rights of the citizen as those rights stood at common law, instead of the Government, and make it an authority for the invasion of private rights under pretext of the public good which has no warrant in the laws or the practices of our ancestors.

In Canada's Federal System, by A. H. Fefroy, it is said, in regard to the courts of Canada, on the matter and title of law courts, under section 7 that the law courts are not concerned with the justice of acts passed by their legislators. On page 82 it says it is not competent for any court, when once an act is passed, by either the Dominion Parliament or a provincial legislature, in respect to any matter over which it has jurisdiction to legislate, to pronounce the act invalid because it may affect injuriously private rights, any more than it would be competent for the courts of England for the like reason to refuse to give effect to a like act of Parliament of the United Kingdom. If the subject be within the legislative jurisdiction of the Parliament and the terms of the act be explicit, effect must be given to it so long as it remains in force in all courts of the Dominion. However, private rights may be affected, citing Law of Legislative Power in Canada, pages 279, 288, and especially the dicta of the privy council in the Fisheries case, 1898, A. C., at page 473; Hodge *v.* The Queen, 1883, 9 Appeal Case, page 131, 132, and the Liquidators of the Maritime Bank *v.* The Receiver General of New Brunswick, 1892, A. C., on page 441, 442. The privy council decision in the early case of L. Union St. Jacques *v.* Belisle, 1874, L. R. 6 P. C., 31, really established this. There it appeared that the laws of the union fixed the relief to be given to its members and the class of beneficiaries to receive it, amongst whom were, during their widowhood, the widows of a certain standing in the society. An act of the legislature of the Province wherein the union was incorporated, in their lordship's words:

> Taking notice of a certain state of embarrassment resulting from what it describes in substance as improvident regulations of the society, enforced commutation of their existing rights upon two widows.

Nevertheless they held the act was intra vires. In another and much more recent case, which went to the privy council, citing McGregor *v.* Esquimalt and Manaimo R. W. C. in 1907, A. C. 462, and others.

It appeared that the British Columbia Legislature had in 1883 granted by statute the land in question, with its mines and minerals, to the Dominion Government in aid of the construction of the Esquimalt & Manaimo Railway Co., and that in 1877 the Dominion Government granted it to the railway company. In 1904, however, the British Columbia Legislature passed an act declaring that a grant in fee simple, without any reservation as to mines and minerals, should be issued to certain settlers therein defined, and a grant was

made to the appellant of the same land. The privy council held that the act of 1904 in its true construction legalized the grant thereunder to the appellant and superseded the title of the railway company and was intra vires.

The land, of course, had ceased to be the property of the Dominion in 1887, and now in the very recent Alberta *v.* The Great Waterways case: Royal Bank *v.* The King, 1913, A. C., 283, their lordships say:

> Their lordships are not concerned with the merits of the political controversy which gave rise to the statute, the validity of which is impeached. What they have to decide is the question, Was it within the power of the legislature of the Province to pass the act? Our legislatures, moreover, are not restricted by the limitations of what is called the right of eminent domain under the United States Constitution.

Thus the passage in Kent's Commentaries is quite inapplicable to them (the United States) where it is written:

> If it (the legislature) should take it (private property) for a purpose not of a public nature, as if the legislature should take the private property of A and give it to B; or if they should vacate a grant of property or of franchise under the pretext of some public use or service, such cases would be gross abuses of their discretion and fraudulent attacks upon private right, and the law would be clearly unconstitutional and void.

Neither have we in our constitution anything like the provision of the United States Constitution, that "no State shall pass any bill of attainer, ex post facto law, or law impairing the obligation of contracts," and that as to Congress itself, "no bill of attainer or ex post facto law shall be passed," all of which forcibly brings out the difference between the sovereign powers of Canadian legislatures, where legislating on the subjects committed to their jurisdiction and the limited powers of legislatures in the United States.

In regard to public use in England: On the one hand the taking of private land is not so restricted under the exercise of the crown as against that more particular showing of the public need which is necessary to establish and support the conditions necessary under the doctrine of eminent domain in the United States. It might seem to the citizens of the United States that it is unfair to the holders of property under the Kingdom of Great Britain that there is not that extreme particularity exercised before they are divested of their property. In the United States it is clearly necessary that a public use be shown, and then in the measuring of damages the individual property is subjected to a closer rule or measure of damages, namely, the damage to the property by actual invasion or taking, and the measure of damages is limited to the market value. On the other hand, under the Dominion of Great Britain there is wider liberality in the taking of private property. There is, too, a broader measure of compensation for land taken, injured, or in any way damaged.

Quoting from the Law of Compensation, by J. H. Balfour Brown, K. C., and Charles E. Allen, page 97, where is discussed section 63 of the land clauses, consolidation act of 1845:

> *The value of land to be purchased.*—The fundamental principle in assessing compensation is to discover what the person will lose by having his land or his interest in it taken from him. It is the value of the land to the owner that is the subject compensation, not merely its market value, nor its value to the promoters taking it, but its value to him. His interest may be subject to restriction, which lessens the value or it may be held together with rights which are

beneficial, or other advantages which enhance the value to him. It is the value of the land, with all its potentialities, and with all the actual use of it by the person who holds it that is to be considered in assessing the compensation.

On page 104, section 63:

Damage by reason of severance of the lands taken from those held therewith.—In order that damages may arise from severance it is not necessary that the land should be held under the same title for the same estate or for the same purpose or that the lands should be contiguous. It is enough if both parcels are held by one and the same owner, and if the unity of ownership conduces to the advantage or protection of the property as one holder. * * * If the several pieces of land owned by the same person are near to each other and so situated that the possession and control of each gives an enhanced value to oll of them they are lands held together within the meaning of sections 49, 63.

Mr. MIGNAULT. Are there any specific cases of severance here?

Mr. BERKMAN. I think there probably are.

Mr. MIGNAULT. I would like to know a little more about that. In severances where a railroad, for instance, crosses a farm, the two parts of the farm are severed and communication is rendered more difficult, and that is a subject for compensation.

Mr. BERKMAN. I did not so understand it.

Mr. MIGNAULT. However, I do not want to interrupt you.

Mr. BERKMAN. On page 116, under section 68, there are four propositions which have been laid down by the House of Lords for determining whether a right of compensation for injurious affection exists under these statutes:

I. The damage caused must be by reason of what has been authorized by the legislature and not from other acts.

NOTE.—If there is a wrong done, which is not authorized by the powers conferred by the legislature, the common law right of action remains. The statutes only give compensation for losses sustained in consequence of what the promoters of an undertaking may do lawfully under their statutory powers and that for anything done in excess of these powers or contrary to what the legislature in conferring these powers has commanded, the proper remedy is by action.

II. The damage must arise from that which would, if done without the authority of the legislature, have given rise to cause of action.

III. The damage must arise from a physical interference with some right, public or private, which the owners or occupiers of property are by law entitled to make use of, in connection with such property which gives them additional market value to such property apart from the uses to which any particular owner or occupier might put it.

IV. The damage must arise from the execution of the works and not by their subsequent use.

CASES WHERE COMPENSATION RECOVERABLE.

Section 68, page 124, bottom of page. Where a house fronting on a public highway is depreciated in value by a railway company erecting an embankment on a portion of the highway opposite thereto, thereby narrowing the road from 50 to 33 feet, the owner was held entitled to compensation. (Beckett *v.* Midland R. R. Co., 1867, L. R., 3 P. C., 82, p. 125.)

Page 125, access to the sea. This is also a subject of compensation, when a railway company erect an embankment and cut off access to the sea from a house.

Access to river. In a case under a different act it was held that in the case of navigating a public river, connected with an exclusive access to and from a particular wharf constitutes a form of enjoyment of the land and of the river in connection with the land, the disturbance of which may be vindicated in damages by an action. Such a right of access from a river would give, if obstructed, a right of action.

Private way. Private rights of way, and easements of way appurtenant to property, and such rights as would pass on a demise as continuous and apparent easements, are also subject to compensation.

Page 102, section 63. Potential or prospective values of lands. If the land from its situation, or otherwise, may probably become valuable. * * * this probability should be taken into account.

Measure of compensation, special adaptability. In estimating the value of a stream it is necessary to take into account the use to which it can be put relatively to the land; practically speaking, the value of water must be measured by the deterioration of the value of the land occasioned by its loss. Its value for fishing should be taken into account, watering of cattle, or as ornamental water. If a stream may be adopted for purposes other than for which it has been used that adaptability should be taken into account in estimating the value, although the owner may never have obtained 1 farthing for the use of the stream.

Mr. Rockwood yesterday referred to the small value of power sites, so far as concerns the actual money that people would raise to put in in the first process of development; and likened it to fixing the value of the property in a county; that the market value was easy to fix, but that the real value to the community could not be measured in those terms. He also called our attention to the property values that existed but a few years since in relation to the value of farm lands in Canada; before the market value in a community was fixed the land could be bought for from $1 to $2 per acre, but since market values have been fixed these lands are worth from $30 to $50 per acre.

The lands under consideration have just such potential values, and were it not for reason of the trespass caused by the operation of the dam the entire area between 1,057 and 1,060 would be at an intense state of cultivation. Crops, hay, and pasture would have been the evidences of value, instead of the reference by the engineers in their text to swamp and bog and typical settlers' cabins.

In this connection one of the counsel for the power companies says that he is willing to admit that the riparian owners' values as to the cultivated areas are not bad, and that he considers grass lands free from the incumbrance of timber is worth nearly as much. The engineers testified that those lands below 1,051 are very susceptible to cultivation once the water is off.

The evidence is that there is not as much muck or peat on most of the American lands between the contours 1,062 to 1,057 as there is on lands lying higher and farther inland to the south. It means that all that area between 1,062 and 1,057 is not incumbered with timber and the cost of clearing and the designation of swamp and bog by the engineers are not a correct representation as to natural conditions.

Mr. Powell. Peat must be burned, must it not?

Mr. BERKMAN. They just pasture it and work it into meadow and an intense state of cultivation. As a matter of fact, peat on lands lying high is 2 to 3 feet deep. They pasture it for three or four years and the evidence of its rawness changes and it becomes valuable for meadow. In the course of its gradual development it becomes very good soil.

The question of prescription has been raised by eminent counsel, and they contend that because they have been trespassing for a number of years that they have acquired a vested right.

Where are we, anyway? Is it not a more reasonable proposition to say that compensation should be awarded to the riparian owners for the damage by trespass that maintenance above natural levels has caused before the operators of the dam should be allowed to so operate it above any stage of 1,057 in the future?

The matter of redress for the wrong done to our citizens is a laudable enterprise for the commission.

It is an easy matter to account for high stages, so far as the permission of the riparian owners is concerned, for it can not be contended that our courts or our lawmaking bodies could legislate or adjudicate and then enforce by the police power of the State the act or edict in Canada.

No; the claim of permit or adverse possession could not commence to run until at least we would have jurisdiction to abate high and unnatural stages of water by way of an injunction on the ground of its being a public nuisance, or the riparian owners would have the right of action for damages.

What these riparian owners have suffered from excessive flooding should be one of the big elements in fixing a liberal amount for damages in addition to the compensation for the taking.

In regard to the Stenberg case (112 Minn., 117), cited by Mr. Rockwood, I will say that was a closely contested case. It involved bad shore conditions and grass grew up so that the banks became a slough because of the shallowness of the water in the lake, so the court held that the facts disclosed that the outlet had been widened and deepened from that in a state of nature, and held that the public use for boating and use by the public was such a one that would warrant the raising of the lake to ordinary high-water mark as in a state of nature, and the public use was the use of the banks for ingress and egress to and from the lake, the very thing that will be taken from this community of riparian owners in case that a higher stage than 1,057 is fixed.

If a stage of 1,057 or below is fixed, the sewage question at Warroad would be disposed of, because it would drain in the regular way by gravitation into the lake or river.

Mr. POWELL. That could not be at high stages of water.

Mr. BERKMAN. I referred to a stage of 1,057.

Mr. POWELL. But taking natural conditions, waters run up to 1,062. What would you do with your sewers then?

Mr. BERKMAN. I have conceded that a certain stage of water should be fixed by this commission.

Mr. POWELL. What is the bearing of all this argument? It is very well prepared, Mr. Berkman, but what is the point of it? What do you want us to do now on the strength of what you are saying? Just

give us some idea of the logical coherence of your treatise. On the strength of what you are saying, what do you want us to do?

Mr. GLENN. He wants a stage of 1,057.

Mr. BERKMAN. Mr. Glenn has given the answer.

Mr. Steenerson has correctly asked if it would be necessary for these poor farmers to go into court and fight Mr. Rockwood, pay their expenses, and that of their witnesses and counsel, and then be confronted with such witnesses as the power companies advanced at International Falls. It would be pure and simple confiscation of their property for the private emolument of another individual interest, and I am certain that this commission would inflict no such calamity on that community.

Mr. MIGNAULT. As far as prescription is concerned, Mr. Berkman, I consider the answer of Congressman Steenerson as absolutely conclusive. It is the application of the Roman law, contra non valentem agere nulla currit præscriptio.

Mr. BERKMAN. As a matter of fact, I do not think the eminent counsel who advanced it was serious in his proposition.

Mr. CAMPBELL. May I point out—I thought I made it very clear—that I referred to one Minnesota case which is still law on prescription as illustrative for the purpose of interpreting the treaty. I did not urge that we had a right by prescription at all, but as between Minnesota citizens themselves, a right by prescription would arise in 15 years, and that that was one test by which to interpret the treaty.

Mr. BERKMAN. If you fix high stages of levels with wide variation in lake levels, Mr. Rockwood says that this regulation would be worth, when they have use for it, $10 per horsepower, $1,000,000 per year for regulation alone, and that alone the increase of 500,000,000 cubic feet storage on Rainy Lake will pay the interest on $1,000,000.

This premise certainly warrants the highest possible degree of compensation, because the taking even exceeds the legislative authority as we find it in Kent's Commentaries.

The agricultural interests involved have been the ones which for the last 10 years have suffered from high stages of water, and in reality a great deal of the agricultural possibilities for that time have been wholly obliterated. It is admitted, I believe, that the lands that are to be overflowed if the commission should recommend any stage of water above 1,057 are very fertile, and that they lend themselves to a state of cultivation and so-called subjection in a very short time, if only the water is off the land. Since these lands, or much of the land, on the American side are free from timber, the cost of clearing such lands is small, and all the land down to and including the stage of 1,057 will at once change from the effects of the continuous high stages of water caused by the artificial obstruction at the outlet of the Lake of the Woods and commence to grow grasses suitable for pasture, and then the process to meadows and cultivation is rapid. It is evident lands lying in the vicinity of the lake, because of the natural conditions existing, have a certain value attached to them that lands distant from the lake would not have. It may be said that there is no market value to these lands, and that is true because of the peculiar conditions existing. The evidence as to values given by the riparian owners at the hearing at Warroad are supported by the testimony of George Ralph, formerly State drainage engineer, of Minnesota. Mr.

Ralph is acquainted with this section of the country, having been in charge of the field work during the Government survey of these lands and the establishment of the meander line on the lake. Mr. Ralph has been accepted as a competent witness as to land values by some of the power companies interested in the water controversy as to the waters of the Lake of the Woods watershed, he having been placed and used by them as a witness as to land values in the vicinity of International Falls. Mr. Ralph testified that the lands which have been submerged and damaged by reason of high stages of water, down to the meander line, are worth $60 per acre.

I must not forget to call your attention to the playground at the village of Warroad that high stages of water will raise havoc with, and the depreciation in property values that high stages will cause in comparison with a stage of 1,057.

Then, too, I wish to call your attention to the testimony of Thomas Jones as to the depreciation of the values of town sites, and this testimony applies to other town sites, the properties held by other persons in the village of Warroad, and all the property, residences, and business houses as well.

Mr. Ralph's statement is a general one and it supports the claims of the riparian owners.

This talk about the lake not reaching the high stage more than once in a long period of years would be very well if the plan of the consulting engineers is to be adopted, but we can, since it is indicated that the power interests would rather have a control board, assure ourselves that using the terms of Mr. Rockwood, that there is never enough so long as any more is possible, if I have the meaning right, we can be certain that the power companies would want to go into winter storage with the lake full, and the result would assure us continuous high stages of water, to the limit permitted, as much of the time as it would be possible to keep it full, and not, as expressed, when they could not help it.

A discharge capacity larger than the one advanced could be made and thus the lake be kept at a higher maximum capacity stage for a great deal more of the time.

I do not think that the power people are at all serious in their contention that the reference means that the commission should consider the stage held by artificial means as the natural and normal level, and for that reason I will not add anything to what has already been said.

Before I close there is one thing that I would like to call more clearly to the attention of the commission, and that is the prayer of the community surrounding the Lake of the Woods, that the domestic and sanitary purposes, fishing purposes, and the most advantageous use of the shores and harbors and the power purposes of the waters flowing into the Lake of the Woods will overbalance power interests, that the ordinary maximum be placed no higher than 1,057.

Then the question of damages solves itself for our interests.

The record shows that this investigation was initiated by a letter of Col. Shunk, but, as a matter of fact, the settlers around the Lake of the Woods had been watching for the promised consummation of the treaty creating this commision a long time before it was consummated, and there was joy in their hearts when the International

Joint Commission was breathed into being by the statesmen of Great Britain and the United States.

Bellamy's wildest dream did not conceive that which has happened in a half score of years, a tribunal to be and exist, as a stabilizer for the passions and the jealousy of the proud people of two of the greatest nations of the earth.

May infinite wisdom so guide the directing hands that the International Joint Commission will exist so long as time may be.

Mr. GARDNER. Mr. Berkman, I do not know that I just caught your meaning where you said that the land would be arable below an elevation of 1,051. Do you mean by that that you could go still farther out into the lake and find land that is capable of being cultivated?

Mr. BERKMAN. Between 1,061 and 1,057.

Mr. GARDNER. I understood you to say in your remarks 1,051.

Mr. BERKMAN. That was a mistake if I did say it.

Mr. TAWNEY. Mr. Berkman, do I understand you to contend that if the commission should fix as the maximum high level 1,057 that there would be any lands then overflowed for which the riparian owners would be entitled to compensation?

Mr. BERKMAN. I think not. I think that probably in the interest of navigation, as has been shown at Warroad, you would be warranted in establishing an elevation of 1,057 without compensation.

Mr. GLENN. You contend that that was the high-water mark before the building of this dam?

Mr. BERKMAN. Yes, sir; as defined by the decision of Judge Mitchell.

Mr. GLENN. Below that these people could not recover any damages, but above that they could?

Mr. BERKMAN. Yes; that is our contention.

Mr. TAWNEY. Do you not believe that the riparian owners on the Lake of the Woods would be disappointed more by our fixing the maximum high level at 1,057 than they would be if we were to fix a higher level with ample compensation for lands that were overflowed?

Mr. BERKMAN. In answer to that I will say, no; that we must consider the benefits to the lands lying above any fixed stage, and it is in the interest of those people having lands above any fixed stage and their right of access to the lake, and not having these swamps and other unsatisfactory conditions prevailing. That is the biggest thing. It is far bigger than any measure of compensation that you may give. It is wholly and totally, as we see it, a public use; that is, the right and the privilege to have access to the lake. It will hasten the building up of the community and of the village of Warroad and other villages that may spring up in time.

Mr. GLENN. Do you take the position that Mr. Steenerson takes, that we ought to have a certain fixed level and not have a range varying from high to low?

Mr. BERKMAN. The ability to regulate any fixed level depends upon the discharge capacity that is decided upon. I think that most of the time it could be kept within a stage of 1 foot, if we followed the plate referred to yesterday, plate 139, top of page; and when the lake gets below a certain stage put in the stop logs. It may be that one year in that 25 or 30 years it will get above, but if it does get away

I think it is that owing to unusual circumstances in nature that the riparian owners would have to suffer without compensation if an ordinary maximum is fixed at 1,057.

Mr. GARDNER. Mr. Hilton, we will hear you now.

ARGUMENT OF MR. CLIFFORD L. HILTON.

Mr. HILTON. Mr. Chairman and gentlemen of the commission, the State of Minnesota in this proceeding appears primarily as a landed proprietor. It owns a large quantity of land on the southern borders of Rainy Lake and its tributaries, and those lands are such lands as are referred to in the second paragraph of the reference; that is, lands that are likely to be injuriously affected by the maintaining of the waters of Rainy Lake and tributaries above the natural normal level.

At the hearing at International Falls in September, 1915, a resolution was passed by this commission, the language of which appears on page 7 of the report of the hearings at that place in January, 1916. In that resolution the following language is used:

> The secretary for the United States is directed to communicate with the State auditor of Minnesota, requesting him to file with the commission a verified statement showing the location and value of State-owned lands that might be injuriously affected by any level the commission might recommend.

Upon the receipt of a copy of that resolution, and in accordance with the request of the commission, the State of Minnesota at once proceeded, or rather the State auditor of Minnesota proceeded, to take the necessary steps to obtain the information called for by this commission.

At the hearing at International Falls held by a committee of this commission—and because it was held by a committee I may refer to just what was done there a little more fully than I would if the entire commission had been present—the State of Minnesota produced State Auditor Preus as a witness, and also State Engineer Berg. At the Winnipeg hearings it produced the State drainage engineer, Mr. E. V. Willard, for the purpose of furnishing information relative to the laws of the State of Minnesota as to drainage and the three systems of drainage that are in use in that State.

In addition to the testimony of the witnesses that I refer to, the State introduced at International Falls two exhibits, known as Minnesota Exhibit A and Minnesota Exhibit B. These two exhibits were the original records of the State auditor's office showing the appraised valuation of each and every piece of State land that would be injuriously affected by the raising of the waters of Rainy Lake and its tributaries. With the consent of the committee those original exhibits were withdrawn, they being a part of the official records of the State auditor's office, and there were substituted in place thereof Minnesota Exhibits A1 and B1. The appraisers that were appointed were so appointed pursuant to the laws of the State of Minnesota, which laws I will hereafter refer to and quote from. One appraiser was appointed by the State auditor, one by the governor of the State, and one by the county commissioners of the county wherein the land is located.

An examination of Minnesota Exhibits A1 and B1, which the commission now has before it, will show the extent of the apprais-

ers' work. It will show that every single piece of land affected was visited by these three appraisers. Each exhibit contains a description of land, the value of the land, and an estimate of the value of the timber thereon. In addition to that the State of Minnesota, at the hearing at International Falls, introduced Exhibit C. This was a statement prepared at the State auditor's office showing the various tracts of land that had been sold in Koochiching County during a number of years and the sale prices thereof. This information was requested by Mr. Rockwood, representing the power companies, and it also seemed to be the desire of the commission to have some evidence showing actual sales that had been made.

Mr. TAWNEY. Mr. Hilton, were copies of these Minnesota exhibits offered at International Falls furnished to the office here at Washington or the office at Ottawa?

Mr. HILTON. Minnesota Exhibits A1 and B1 were filed with the secretaries of the commission at International Falls.

Mr. TAWNEY. They were not printed in the record?

Mr. HILTON. No; they were not printed in the record.

Mr. TAWNEY. I thought possibly they were not received at the Washington office or at the Ottawa office.

Mr. HILTON. They were filed at International Falls by me at the time of the hearing.

Mr. SAMUELSON. They are here on file now at Washington, as well as the exhibit that I filed at the same time.

Mr. MIGNAULT. They could be printed along with the argument, if necessary.

Mr. HILTON. I should assume that it would be a proper thing to have them printed along with other exhibits. But you will remember that there was a great number of exhibits offered there on behalf of the State and on behalf of the settlers, and none of them appear to be in the record.

Mr. MIGNAULT. Some of them were pretty bulky.

Mr. HILTON. Yes; that is true. As I was just saying, Minnesota offered Exhibit C, which was a list of land sales made, showing the description of the lands, where they were located, and also to whom they were sold. It showed also the date of the sales and the prices. Some of the sales were down to the summer of 1915.

Mr. POWELL. Have you gone through these to see how many of them are within the area that will be flooded?

Mr. HILTON. All of them. Neither Minnesota Exhibit A1 or B1 has any land on it except that which will be injuriously affected by raising the levels of Rainy Lake and its tributaries above the natural normal level.

Mr. MIGNAULT. Up to what level, Mr. Hilton.

Mr. HILTON. At any contemplated level above the natural, normal level. The quantity of the lands that will be flooded and the extent of the damage, of course, depends on the height of the level; and I have an exhibit that takes care of that.

Mr. MAGRATH. Mr. Hilton, what is your interpretation of the term natural or normal level?

Mr. HILTON. What I would call high-water mark as originally established and which, I think, in Rainy Lake and its tributaries is

coterminous with the Government meander line as shown by the Government field notes in the United States Land Office.

Mr. SAMUELSON. About 491, Canadian bench mark.

Mr. POWELL. These lands are all bounded by the lake or the tributaries of Rainy Lake?

Mr. STEENERSON. Yes; there is nothing on the Lake of the Woods.

Mr. POWELL. Have you anything analogous to this in respect to the Lake of the Woods lands?

Mr. HILTON. Nothing at all. The State owns no lands at the present time along the Lake of the Woods.

Mr. POWELL. They are Federal lands?

Mr. HILTON. No; they are privately owned lands, I believe.

Mr. TAWNEY. There are some Federal lands, too. There are Chippewa Indian lands in Beltrami and Roseau Counties.

Mr. GARDNER. These surveys were made in advance of any construction at International Falls and before the natural level of the lake was raised at all, were they?

Mr. HILTON. Yes; those surveys were made by the Government surveyors at different times, most of them before 1892, and, in regard to some lands, after 1892.

Mr. TAWNEY. These lands were all obtained from the Government under the swamp-land grant?

Mr. HILTON. I will come to that soon.

Mr. KEEFER. I think there is somewhere a record of the sales around the Lake of the Woods also. If that information can be furnished it would be of great assistance.

Mr. HILTON. I will say that the State owns no lands around the Lake of the Woods that would come within the provisions of this reference—that is, no lands that would be injuriously affected by the establishment of any particular level at the Lake of the Woods. We prepared no statements as to any sales that might have been made there and have no evidence to offer as to them.

Mr. LAIRD. During the hearings at International Falls in September last, Mr. Keefer stated to the commission that the State auditor had offered to give the commission information as to the sales of land for the last three years. Mr. Keefer asked me if I would follow the matter up, and I wrote to the State auditor asking him if he would forward us a copy of the statement furnished, if consistent with his regulations. At Winnipeg, as the record will show, I inquired as to whether such a statement had yet been received. I had in mind the lands around the Lake of the Woods. Commissioner Tawney, I take it, thought I was referring to the lands in Koochiching County and said the statement had been filed. Such a statement is filed as to Koochiching County, but I can find none as to Beltrami and Roseau Counties. In reply to my letter the State auditor gave me the information. From his letter I have information as to the average price of land sold in the State—that is, the sales of State lands for the last three years, and I would like very much if such a statement could be before the commission; but, although I have the information, it is simply in reply to a letter and I have not the original letter with me.

Mr. KEEFER. It would be very helpful if we could get that information.

Mr. BERKMAN. I think that under the situation of where these lands can not be taken under the doctrine of eminent domain, and where there can be no public use attached, that the question at this time of sales of State lands is wholly irrelevant, immaterial, and incompetent. The hearing is concluded.

Mr. SAMUELSON. Mr. Chairman, it would rather strike me that any sales that had been made by the State of Minnesota within three years, or at any time prior to the present, would be absolutely immaterial as having any effect upon the value of lands involved. The price that the purchaser paid for those lands at that time would be no indication of the present value of the lands. The value of most of those lands is raised by reason of the manual labor that is actually placed upon them by the settlers, and, of course, the sale of wild land would not have any particular bearing one way or the other.

Mr. POWELL. It would in this way, Mr. Samuelson. A tremendous area of these lands is not under cultivation in a wild state, so it would have a bearing on those wild lands.

Mr. SAMUELSON. The wild lands ordinarily are mostly owned by the State of Minnesota, and are mostly around the Rainy Lake region. If I understand correctly, the State is the owner of no wild land in the neighborhood of the Lake of the Woods, and it is because of that fact that no statement has been filed here by the State.

Mr. PREUS. Mr. Keefer was present at the International Falls hearing, which hearing I also attended. I had been present at two hearings at International Falls, and at one of those hearings Mr. Keefer asked me if the State of Minnesota could not supply a list showing what it had received for lands during the past three years. I took his request to mean that he wished it for Koochiching County. I did that because the State of Minnesota is only interested in the lands in Koochiching County and a small amount in St. Louis County. It is not interested in any lands over in Beltrami County nor in Roseau County. The lands that Minnesota has in Beltrami and Roseau Counties are not located on the border of the Lake of the Woods; they are farther into the county. I held a sale week before last in Roseau County, where a great portion of a large swamp just reclaimed was sold. My recollection is that the land brought there at public auction on an average about $10 an acre. The price went up as high as $17.25 an acre, as I recall it. That was a raw bog that has just been drained. The drainage was finished last year.

Mr. GARDNER. It was not contiguous to the lake?

Mr. PREUS. No; it was about 45 or 50 miles from the lake, and about 25 miles from a railroad.

Mr. KEEFER. Would you deem the information that you supplied to Mr. Laird in your letter to him sufficiently correct to be filed? It might be of considerable importance to the commission to have the data for the last three years as to public dealings in lands.

Mr. PREUS. I would be very glad to supply any information that the commission desires.

Mr. KEEFER. The information you have given Mr. Laird covers the point, does it not, Mr. Laird?

Mr. LAIRD. Yes.

Mr. PREUS. The lands in Roseau County are far more valuable than any of the lands in Koochiching County.

Mr. KEEFER. The statement you gave Mr. Laird would be correct, would it not?

Mr. PREUS. I do not recall it now.

Mr. BERKMAN. With respect to anything that is offered pertaining to values affecting the Lake of the Woods, I would state that these lands were sold under the hammer. They are put up, and if there is one man there he gets it for the price set by the State. If there are two men there may be a little competition; it depends on the crowd that is present whether they buy or not.

Mr. KEEFER. Is there any further step that could be made in this matter? I think it might be of considerable use to you. I would like to see you get the information.

Mr. POWELL. If it is 25 miles from the railroad and not bordering on the lake, while it is admissible, it would not be much of a guide with respect to valuation, and especially in view of the fact that the auditor says that the value of land there is higher than it is at the lake.

Mr. PREUS. I did not mean to say just that. I meant to say that the lands in Roseau and Beltrami Counties are higher than lands in Koochiching County. The reason for that is that they are reclaimed swamp lands, while in Koochiching County they are cut-over lands.

Mr. KEEFER. Could you give us a rough idea of any lands that have been sold around the lake in the last few years?

Mr. BERKMAN. I object to that procedure. We are not making a witness out of State Auditor Preus at this time.

Mr TAWNEY. I do not think it is material anyway.

Mr. HILTON. When interrupted I was referring to Minnesota Exhibit C, which is a list of sales made in Koochiching County, giving the description of the lands sold, the parties to whom the land was sold, the date of the sales, and the prices.

The State next offered at International Falls Exhibits D and E. I presume the secretaries have those exhibits. They were long maps showing that entire country along the Rainy River, Rainy Lake, and the tributaries, with lands that the State owned and which were described in Minnesota's Exhibits A1 and B1 colored in green, so that the commission could locate any particular piece of land that was described in those exhibits in relation to the lake and the other waters, or in relation to its distance from International Falls or any other village that there might be in that locality.

Then we introduced Minnesota Exhibits F and G, which show the number of acres of land that would be injuriously affected at any given level; took the appraisers' price upon the lands which had been examined and the value ascertained, made a computation by multiplication as to how much the damage would be to the various tracts and totaled the different sums so that at the bottom of each of those exhibits the commission will have before it exactly the number of acres of land that will be flooded at these different levels, both on Rainy Lake and on account of the Kettle Falls Dam; and also the damage that will be sustained by the raising of the water and maintaining it at any level in question.

Mr. MAGRATH. That exhibit is built up from the areas flooded and the values as shown in Minnesota Exhibits A1 and B1?

Mr. HILTON. No; it is made up from the values shown in Minnesota Exhibits A1 and B1, but the acreage appears from the testimony of the State engineer, Mr. Berg, as to what the damaged area would be in each particular subdivision. The values are in the exhibits you have before you—the values placed by the appraisers—but the amount of acreage that would be damaged was shown by the testimony of State Engineer Berg.

Mr. MAGRATH. You have a column here showing the number of acres of waste and flooded land, and also a column showing the value per acre.

Mr. HILTON. In that column appears the description of the land. If you will notice, all through the report is very comprehensive. It shows everything in regard to the topography of the land, but the first column of acreage shows the number of acres originally in the governmental subdivision, either by forties or lots, as the case may be.

Mr. TAWNEY. These other exhibits show the land that is damaged by reason of the overflowing of the adjoining lands?

Mr. POWELL. On what basis did the engineer of the State of Minnesota make his calculations with respect to land that would be injured?

Mr. HILTON. He took his own survey of the lands for establishing a high-water mark, which, as I say, we contend—and I think there is probably no dispute about that—is the same as the meander line as shown by the Government field notes, and figured from that up to contour line 498. Then, after having computed the acreage between those two lines, he figured up to 499 and up to 500. That is on Rainy Lake and its immediate tributaries.

Mr. MIGNAULT. All that is stated in Mr. Berg's testimony.

Mr. HILTON. It is in his testimony as to how he did that.

Mr. POWELL. But when he spoke of land injuriously affected did he take into consideration the injury that would result above the new water level?

Mr. HILTON. He did particularly in the Kettle Falls district, and he made the computation as to the amount of lands that would be thus injuriously affected by not being able to drain.

Mr. POWELL. To what height above the water level did he assume that lands would be injuriously affected?

Mr. HILTON. It would depend upon the land—the character of the soil and the slope of the land—and also the depth of the muck or muskeg, if it happened to be that kind of land. All that appears in Mr. Berg's testimony.

Mr. POWELL. Do you know how high he thought the injurious effect might extend?

Mr. HILTON. No; I do not now just recall.

Mr. POWELL. We have had some statement to the effect that it would be 2 feet and some a foot and a half.

Mr. HILTON. In passing, I might say that there was no dispute, relatively speaking, between the figures prepared by State Engineer Berg and the figures of your consulting engineers as to the acreage between these lines. At some places your engineers had it a few

acres more and at other places Mr. Berg had it a few acres more, but, as I recall it now, in that whole acrea of over 18,000 acres there was not a variance of more than 40 or 50 acres. It speaks volumes for not only the efficiency but the accuracy of the engineers in making those examinations and in arriving at their computations as to acreage.

Lands of the State of Minnesota involved in this proceeding are described and set forth in Minnesota Exhibits A1 and B1, and consist of so-called school lands and swamp lands. The lands situate in sections 16 and 36 are school lands and were received by the State of Minnesota pursuant to the act of Congress of February 26, 1857. The school lands situate in sections other than sections 16 and 36 were received by the State of Minnesota pursuant to act of Congress of February 26, 1859, and are known as indemnity school lands. The remaining Minnesota lands, known as swamp lands, came to the State of Minnesota by virtue of the act of Congress of March 12, 1860.

The act of February 26, 1857, being an act authorizing a State government and being the act relative to the State of Minnesota, provides in paragraph 1 of section 5 as follows:

> That sections numbered sixteen and thirty-six in every township oof public lands in said State, and where either of said sections, or any part thereof, has been sold or otherwise been disposed of, other lands equivalent thereto, and as contiguous as may be, shall be granted to said State for use of schools.

That is a provision that I think appears in practically all of the enabling acts of the various States of the Union; that is, sections 16 and 36 are given to the States in every township for the benefit of the public schools.

By the adoption of the constitution of the State of Minnesota, October 13, 1857, the propositions contained in the above-mentioned act of Congress were accepted, ratified, and affirmed, and the State of Minnesota thereby received the title to said sections 16 and 36 for the use of school.

The act of Congress approved February 26, 1859, entitled, "An act to authorize settlers upon the sixteenth and thirty-sixth sections who settled before the surveys of the public lands to preempt their settlements," provides that settlers upon sections 16 and 36 may preempt their settlements when made before the survey, and with a view to preemption; and other lands may be appropriated in lieu thereof, and for deficiencies in fractional sections; and provides also that mode of selection and appropriation shall be in accordance with the act of Congress of May 20, 1862, entitled, "An act to appropriate lands for the support of schools in certain townships and fractional townships not before provided for."

The act of February 26, 1859, just referred to, found as chapter 58, 11 Statutes, 385, as amended by the act of February 28, 1891, chapter 384, 26 Statutes, 796; and also found as sections 2275 and 2276, United States Compiled Statutes 1901 reads as follows:

> Where settlements with a view to preemption or homestead have been, or shall hereafter be made, before the survey of the lands in the field, which are found to have been made on sections sixteen or thirty-six, those sections shall be subject to the claim of such settlers; and if such sections, or either of them, have been or shall be granted, reserved, or pledged for the use of schools or

colleges in the State or Territory in which they lie, other lands of equal acreage are hereby appropriated and granted, and may be selected by said State or Territory, in lieu of such as may be thus taken by preemption of homestead settlers. And other lands of equal acreage are also hereby appropriated and granted, and may be selected by said State of Territory where sections sixteen or thirty-six are mineral land or are included within any Indian, military or other reservation, or are otherwise disposed of by the United States; *Provided*, Where any State is entitled to said sections sixteen and thirty-six, or where said sections are reserved to any Territory, notwithstanding the same may be mineral land or embraced within a military, Indian, or other reservation, the selection of such lands in lieu thereof by said State or Territory shall be a waiver of its right to said sections. And other lands of equal acreage are also hereby appropriated and granted, and may be selected by said State or Territory to compensate deficiencies for school purposes, where sections sixteen or thirty-six are fractional in quantity, or where one or both are wanting by reason of the township being fractional, or from any natural cause whatever. And it shall be the duty of the Secretary of the Interior, without awaiting the extension of the public surveys, to ascertain and determine, by protraction or otherwise, the number of townships that will be included within such Indian, military, or other reservation, and thereupon the State or Territory shall be entitled to select indemnity lands to the extent of two sections for each of said townships, in lieu of sections sixteen and thirty-six therein; but such selections may not be made within the boundaries of said reservations; *Provided, however*, That nothing herein contained shall prevent any State or Territory from awaiting the extinguishment of any such military, Indian, or other reservation and the restoration of the lands therein embraced to the public domain and then taking the sections sixteen and thirty-six in place therein; but nothing in this proviso shall be construed as conferring any right not now existing.

SEC. 2276. That the lands appropriated by the preceding section shall be selected from any unappropriated surveyed public lands, not mineral in character, within the State or Territory where such losses or deficiencies of school sections occur; and where the selections are to compensate for deficiencies of school lands in fractional townships, such selections shall be made in accordance with the following principles of adjustment, to wit: For each township or fractional township containing a greater quantity of land than three-quarters of an entire township, one section; for a fractional township containing a greater quantity of land than one-half and not more than three-quarters of a township, three-quarters of a section; for a fractional township containing a greater quantity of land than one-quarter and not more than one-half of a township, one-half section; for a fractional township containing a greater quantity of land than one entire section and not more than one-quarter of a township, one-quarter section of land: *Provided*, That the States or Territories which are or shall be entitled to both the sixteenth and thirty-sixth sections in place shall have the right to select double the amounts named, to compensate for deficiencies of school land in fractional townships.

The State of Minnesota secured the swamp lands by virtue of the act of March 12, 1860 (sec. 2490, Comp. Stat., of the U. S., 1901). This section reads as follows:

The provisions of the act of Congress entitled "An act to enable the State of Arkansas and other States to redeem" the swamp lands within their limits, approved September twenty-eighth, anno Domini eighteen hundred and fifty, extend to the States of Minnesota and Oregon: *Provided*, That the grant shall not include any lands which the Government of the United States may have sold or disposed of under any law enacted prior to March twelfth, eighteen hundred and sixty, prior to the confirmation of title to be made under the authority of said act; and the selections to be made from lands already surveyed in each of the States last named, under the authority of the act aforesaid, shall have been made within two years from the adjournment of the legislature of each State, at its next session after the twelfth day of March, anno Domini eighteen hundred and sixty; and as to all lands surveyed or to be surveyed thereafter within two years from such adjournment at the next session after notice by the Secretary of the Interior to the governor of the State, that the surveys have been completed and confirmed.

The act of September 28, 1850, referred to in said section 2490, is found as sections 2479 and 2480, Compiled Statutes of the United States for 1901 and reads as follows:

SEC. 2479. To enable the several States (but not including the States of Kansas, Nebraska, and Nevada) to construct the necessary levees and drains, to reclaim the swamp and overflowed lands therein—the whole of the swamp and overflowed lands, made unfit thereby for cultivation, and remaining unsold on or after the twenty-eighth day of September, anno Domini eighteen hundred and fifty, are granted and belong to the several States respectively, in which said lands are situated: *Provided, however*, That said grant of swamp and overflowed lands, as to the States of California, Minnesota, and Oregon, is subject to the limitations, restrictions, and conditions hereinafter named and specified, as applicable to said three last-named States, respectively.

SEC. 2480. It shall be the duty of the Secretary of the Interior to make accurate lists and plats of all such lands and transmit the same to the governors of the several States in which such lands may lie, and at the request of the governor of any State in which said swamp and overflowed lands may be to cause patents to be issued to said State therefor, conveying to said State the fee-simple of said land.

The proceeds of said lands, whether from sale or by direct appropriation in kind, shall be applied exclusively, as far as necessary, to the reclaiming said lands by means of levees and drains.

In passing I desire at this time to call attention to one thing. These lands are known as swamp lands. That by no means indicates that the lands are worthless lands. Some of the swamp lands secured by the State of Minnesota are the most valuable lands that were secured in the public domain. The indication of the word "swamp," as I say, by no means carries the impression that the land is worthless. To indicate how these lands are determined to be swamp or nonswamp I will state that when the original Government surveys are made only the exterior boundaries of a section are run. The Government surveyors start at one corner—I think it is the northwest corner, but I will not be sure about that—and run the exterior boundaries of the section, making notations upon their notes as to the kind of land they strike, how many links and chains from the starting point they strike it; they make a notation of when they strike swamp land and when they leave swamp land. Under the rule adopted for determining the area and extent of swamp land a straight line is drawn from where the surveyors enter swamp to where they leave it; and in each subdivision of the section, each 40-acre tract, if by the means of drawing these lines it appears that more than half of that forty is swamp, it is put in as swamp land; if less than one-half is swamp, it goes in as dry land. When a reexamination is made in the field, pursuant to the orders of the Secretary of the Interior, if more than half of a forty is found to be swamp, the forty is called swamp land and given to the State. If less than half is found to be swamp, it does not pass under the swamp-land grant. This is merely to indicate that the word "swamp" is not by any means determinate as to the value of the land; because a piece of land is said to be swamp land it only means than the major portion of that particular forty comes within the swamp-land grant.

Mr. POWELL. We may say that it averages up.

Mr. HILTON. Yes; and I may say that it is an open secret between the State of Minnesota and the Federal Government that the State of Minnesota has at times—we think only to a slight extent, however—secured lands under the swamp-land grant that were not

swamp at all, but we have lost thousands and thousands of acres that were in truth and in fact swamp that we should have had under the swamp-land act but that were returned as dry.

At the hearing at International Falls the State auditor was requested to furnish a statement showing the dates of the surveys of all these different tracts of State lands and also the dates when the same were secured by the State. This information has been furnished to the secretaries of the commission, and appears, I think, as Appendix D.

There are certain provisions of the Minnesota constitution and statutes relative to the public lands that are of particular interest and importance in the consideration of the questions here involved.

Section 32b, article 4, State constitution, has reference to internal improvement lands, and among other things is as follows:

All lands donated to the State of Minnesota for the purpose of internal improvement, under the eighth section of the act of Congress approved September 4, 1841, being "An act to appropriate the proceeds of the sales of public lands and to grant preemption rights," shall be appraised and sold in the same manner and by the same officers and the minimum price shall be the same as provided by law in the appraisement of school lands, under the provisions of title 1 of chapter 38 of the general statutes.

Section 2 of article 8, State constitution, reads:

The proceeds of such lands as are or hereafter may be granted by the United States for the use of schools within each township of this State shall remain a perpetual school fund to the State; and not more than one-third (⅓) of said lands may be sold in two (2) years, one-third (⅓) in five (5) years, and one-third (⅓) in ten (10) years; but the lands of the greatest valuation shall be sold first: *Provided*, That no portion of said lands shall be sold otherwise than at public sale. The principal of all funds arising from sales or other disposition of lands or other property, granted or entrusted to this State in each township for educational purposes, shall forever be preserved inviolate and undiminished; and the income arising from the lease or sale of said school land shall be distributed to the different townships throughout the State, in proportion to the number of scholars in each township, between the ages of five and twenty-one years; and shall be faithfully applied to the specific objects of the original grants or appropriations.

Suitable laws shall be enacted by the legislature for the safe investment of the principal of all funds which have heretofore arisen or which may hereafter arise from the sale or other disposition of such lands, or the income from such lands accruing in any way before the sale or disposition thereof, in interest-bearing bonds of the United States, or of the State of Minnesota, issued after the year one thousand eight hundred and sixty (1860), or of such other State as the legislature may, by law, from time to time direct.

All swamp lands now held by the State, or that may hereafter accrue to the State, shall be appraised and sold in the same manner and by the same officers, and the minimum price shall be the same less one-third (⅓), as is provided by law for the appraisement and sale of the school lands under the provisions of title one (1) of chapter thirty-eight (38) of the general statutes. The principal of all funds derived from the sales of swamp lands, as aforesaid, shall forever be preserved inviolate and undiminished. One-half (½) of the proceeds of said principal shall be appropriated to the common school fund of the State. The remaining one-half (½) shall be appropriated to the educational and charitable institutions of the State in the relative ratio of cost to support said institutions.

The provisions of title 1, chapter 38, General Statutes of Minnesota, 1866, here material, are as follows:

The State auditor shall be ex officio commissioner of the land office. He shall have the general charge and supervision of all lands belonging to the State, of all lands in which the State has an interest, or which are held in trust by the State, and may superintend, lease, sell, and dispose of the same in such manner as shall be directed by law.

Section 6 of this chapter reads as follows:

The minimum price of school lands shall be $5 per acre, and all sales of such lands shall be within the county in which said lands are situated: *Provided,* That pine lands may be sold at such place as may be designated by the commissioner of the State land office, but no lands shall be sold for less than the minimum price, nor less than the appraised value.

Section 5204, General Statutes, 1913, reads as follows:

The minimum price of school lands shall be $5 per acre, and all sales thereof shall be within the county in which said lands are situated: *Provided,* That pine lands shall not be sold until the timber thereon has been sold according to the provisions of this chapter; and when such timber has been sold and removed the land may be appraised and sold as in this chapter provided. Not more than one hundred thousand acres of school lands shall be sold in one year.

Section 5219, G. S., 1913, in part reads as follows:

Whenever, in the opinion of the land commissioner of the State of Minnesota, it will be for the public interest that an appraisal of any of the school or other State lands should be made he shall appoint one appraiser, who shall be one of the regularly employed State cruisers, and who shall not be a resident of the county in which the lands to be appraised are situated, and notify the governor, who shall appoint one appraiser, who may be a resident of such county. The land commissioner shall also notify the commissioners of such county, who shall appoint a third appraiser. Such appointments by the governor and county commissioners shall be made within thirty (30) days after such notice. Each appraiser shall, before entering upon the duties of his office, take and subscribe an oath before such person qualified to administer oaths that he will faithfully and impartially discharge his duties as appraiser according to the best of his ability, and that he is not interested, directly or indirectly, in any of the school or other State lands or improvements thereon, and has entered into no combination to purchase the same or any part thereof, which said oath shall be attached to the report made of such appraisal. Said appraisers after taking oath of office shall proceed to view and appraise such lands and the improvements thereon and make a report thereof to the land commissioner as he may direct. The valuation of such lands and the timber shall each be made and stated separately in the appraisement, and the minimum price established by such appraisal shall be the minimum price for such lands until changed by subsequent appraisal. No school or other State lands shall be sold until so appraised, nor for a less price than five ($5) dollars per acre. Such appraisers shall receive as compensation for their work the sum of five ($5) per day for each day actually employed, which shall include all expenses, except railroad fare, actually expended.

The foregoing section is also found in chapter 196, General Laws. 1911.

The information given by the State auditor, pursuant to the provisions of law requiring such information, is in part in the following language:

TERMS OF SALE.

Fifteen per cent of the purchase price is payable to the county treasurer at the time of sale. The unpaid balance is payable at any time in whole or in part on or before 40 years from the date of sale at an interest rate of 4 per cent per annum, due on June 1 of each year, provided that the interest can be paid at any time within the interest year without penalty. In effect this means that the interest money may be paid any time between June 1 and May 31 without penalty.

Appraised value of timber, when so stated, must be paid for in full at the time of sale. All mineral rights are reserved to the State by the laws of the State.

All lands are sold subject to any and all ditch taxes thereon.

No person can purchase more than 320 acres of land, as provided by the General Laws, 1905; provided, however, that State lands purchased previous to 1905 is not charged against such purchaser.

Chapter 13, General Laws, 1915, reads:

AN ACT To amend section fifty-two hundred and ten, chapter forty, General Statutes of Minnesota, nineteen hundred and thirteen, relating to the terms of interest payments on school and other State lands.

5210. The terms of payment on the sale of all State lands other than pine lands shall be as follows: On those which are chiefly valuable for the timber thereon the purchaser shall pay at the time of sale the value of such timber and on other lands fifteen per centum of such purchase price. In all cases, including pine lands from which the timber has been sold, the balance of the purchase price shall be payable at any time within forty years, at the option of the purchaser, with interest at the annual rate of four per centum, payable on June first in each year.

Mr. POWELL. Is there any difference between the schedule of values you have given here per acre and the authorized minimum value under your laws?

Mr. HILTON. Do you mean on the list of sales?

Mr. POWELL. Yes.

Mr. HILTON. The authorized minimum under the constitution for school lands is $5 an acre. The authorized minimum under the constitution for swamp lands was one-third less than $5 an acre, but the legislature of the State, after the adoption of the constitution, did as they had a right to do; they fixed the minimum for all lands at $5 an acre, so not one foot of State land can be purchased other than at public sale and at a minimum price of $5 an acre.

Mr. POWELL. That is virtually at the valuation at which you returned these in your schedule?

Mr. HILTON. These appraisers go on the land and figure out what the value of it is. They make an estimate and return it in an official way, sworn to, to the State auditor. Then the lands are advertised and sold. They can not be sold for less than the appraised value, whether that be $5, $6, $7, or $10 an acre. That is the minimum price for which the land can be sold. The lands are then put up at public auction. Parties bid on them and the lands are knocked down to the man that bids the highest price.

Mr. MIGNAULT. Is it the policy to put up these lands as settlements open or generally so as to dispose of them?

Mr. HILTON. The policy of the State is to dispose of its lands as rapidly and as advantageously as possible, and not to offer them if it is evident there will not be anyone to bid for them, but to offer lands in localities where there seems to be a demand for them. The limitation to each purchaser is 320 acres. A purchaser can pay 15 per cent down and have 40 years in which to pay the balance.

Mr. MIGNAULT. Are there any conditions as to settlement?

Mr. HILTON. Not now.

Mr. MIGNAULT. Anybody could go and buy 320 acres of land without any condition as to opening up or clearing it?

Mr. HILTON. Yes. The legislature at one time did place certain restrictions in that regard. It said that there must be some clearing and fencing done within five years, but that law has been repealed.

At the International Falls hearing a request was made by me of Mr. Rockwood for a list of the acts of Congress that had relation to the dam at International Falls. Shortly after our return home Mr. Rockwood furnished me with that information.

In that connection, Commissioner Mignault yesterday suggested that he would like to have those acts of Congress. Also, a question

was raised regarding certain language used in the treaty as to use permitted or present use. So far as the International Falls Dam and flowage in the Rainy River country are concerned, it does not make any difference how the language of the treaty is interpreted, because by these acts of Congress it appears that the dam itself was not constructed until after this treaty was entered into, and there was no retention of the waters or damage done until 1912.

Mr. MIGNAULT. As to the date of the reference, was the dam constructed at the time of the reference?

Mr. HILTON. What was the date of the reference?

Mr. MIGNAULT. June 27, 1912.

Mr. ROCKWOOD. The construction of the dam was begun in 1905, and the operation of the mill began in May, 1910. The dam was actually finished a little while before. I can not give the exact date.

Mr. MIGNAULT. When was the water held at a stage of 497; about what date?

Mr. SAMUELSON. In the month of June, 1912, Mr. Commissioner, in the latter part of the month.

Mr. ROCKWOOD. Mr. Commissioner, if I may interrupt just a second, the engineers' reports contain the exact levels from month to month, and the commission will remember that this dam was completed just at the beginning of that period of extreme low water, and it was impossible to fill the dam for some time because of the unusual conditions.

Mr. MIGNAULT. But may I take it that the lake has been held at approximately a level of 497 since the latter part of June, 1912?

Mr. ROCKWOOD. Those precise facts are in the record. It has fluctuated. It has been up to 497, or close to it, once or twice.

Mr. HILTON. One reason why I desire to have these acts of Congress in the record is because the commissioner expressed a desire to have them there, and also because the contention is—although I do not care to argue it at length—that the dam constructed at International Falls, in the manner in which it was, was not constructed in conformity to the provisions of the congressional acts, created no rights that would at all affect the State of Minnesota as to these lands that have been submerged or will be submerged by the raising of the water by means of this dam, or otherwise, to any particular level, and I think Mr. Rockwood, when he was asked during his opening argument as to whether or not there was a dispute to their right to keep the water up to 497, and as to whether there would be any damages claimed, stated that that was a matter in dispute, they contending for one position and the riparian owners contending for the other. I simply mention this so that it will be indicated that there is a dispute in regard to it and that these acts have a bearing upon that question.

Mr. MIGNAULT. And I understand, Mr. Hilton, that there is a proceeding in equity asking for the abatement of the nuisance of the dam?

Mr. HILTON. Yes; I understand from Mr. Rockwood's statement that there is. A number of suits have been instituted by riparian landowners for recovery of damages sustained up to the time of the beginning of the several actions.

It would be important if the two Governments, acting on the recommendation of this commission, would determine all these questions,

because neither the commission or the two Governments can take it for granted that because when you went to International Falls last year and found that the water was maintained at a certain level by a dam that was there such control will always remain there, or that the parties who put in the dam will always keep it there; nor does it follow that as a result of a suit by the State or some individual that the dam may not be torn out. So it becomes important for the two Governments to settle for all time the control that is there now or may be afterwards determined upon.

Mr. TAWNEY. So it is your judgment, Mr. Hilton, that the commission in making its recommendations with respect to the extent of lands submerged and the value of the lands submerged should include lands tributary to Rainy Lake at any level above the meander lines or ordinary high-water level?

Mr. HILTON. Yes; that is our contention.

Mr. MIGNAULT. On that point it strikes me, from my recollection of the report of the consulting engineers, that high-water mark is considerably higher than the Government meander lines as indicated by visible marks along the surface of the lake.

Mr. HILTON. Not in the Rainy Lake country.

Mr. TAWNEY. Whether it is or not, it is your contention that from high-water mark up, regardless of the elevation, it would be proper and expedient for the commission to make recommendations with respect to the value of the lands submerged between whatever level is regarded as necessary to the regulation of the levels of the Lake of the Woods and the high-water mark?

Mr. HILTON. Yes; that is right.

Mr. TAWNEY. In the event that it takes that view, would you say that the commission should recommend that the two Governments, by legislation or otherwise, should cure any defect that may be now existing in the authorization of either the Kettle Falls Dam or the dam at International Falls, so as to make their maintenance permanent as a part of the system of regulating the level of the Lake of the Woods?

Mr. HILTON. That is a matter that had not suggested itself to me at all, and regarding which I have given no consideration. I will now read the congressional acts that I referred to:

ACTS OF CONGRESS RELATING TO RAINY RIVER DAM.

[Chapter 238.]

AN ACT Permitting the building of a dam across Rainy Lake River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby granted to the Koochiching Company, its successors and assigns, to construct across the Rainy Lake River, at any part of the rapids in section twenty-seven, township seventy-one north, range twenty-four west of the fourth principal meridian, in the State of Minnesota, a dam, canal, and works necessarily incident thereto, for water-power purposes. The said dam shall be so constructed that there can at any time be constructed in connection therewith a suitable lock for navigation purposes: *Provided*, That the Government of the United States may at any time take possession of said dam and appurtenant works and control the same for purposes of navigation, by paying the said company the actual cost of the same, but shall not do so to the destruction of the water power created by said dam to any greater extent than may be necessary to provide proper facilities for navigation: *Provided further*, That

the works shall be constructed so as to provide for the free passage of saw logs and fish. The said Koochiching Company, its successors and assigns, shall make such change and modification in the works as the Secretary of War may from time to time deem necessary in the interests of navigation, at its own cost and expense: *Provided further*, That in case any litigation arises from the obstruction of the channel by the dam, canal, or other works erected in connection therewith, the case may be tried in the proper court of the United States in the district in which the works are situated.

SEC. 2. That the right to amend, alter, or repeal this act is hereby expressly reserved.

SEC. 3. That this act shall be null and void unless the dam herein authorized be commenced within one year and completed within three years from the date hereof.

Approved, May 4, 1898.

[Chapter 346.]

AN ACT To amend an act entitled "An act permitting the building of a dam across Rainy Lake River."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section three of an act entitled "An act permitting the building of a dam across Rainey Lake River," approved May fourth, eighteen hundred and ninety-eight, and granting to the Koochiching Company, its successors and assigns, the consent of Congress to construct a dam across the Rainy Lake River, be, and the same is hereby, amended to read as follows: "That this act shall be null and void unless the dam herein authorized shall be commenced within three years and completed within five years after the fourth of May, eighteen hundred and ninety eight.

Approved, May 4, 1900.

[Chapter 1305.]

AN ACT Relating to the construction of a dam across Rainy River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the time for the construction of a dam across the Rainy River by the Koochiching Company, its successors and assigns, as provided by chapter two hundred and thirty-eight of volume thirty of the Statutes at Large, and chapter three hundred and forty-six of volume thirty-one of the Statutes at Large, is hereby extended to May fourth, nineteen hundred and seven.

SEC. 2. That the Koochiching Company, its successors and assigns, is hereby authorized to construct and maintain said dam, subject to the terms of said chapter two hundred and thirty-eight of volume thirty of the Statutes at Large, upon the plans now on file with the Secretary of War, or any modification of said plans which the Secretary of War may approve; and the Koochiching Company, its successors and assigns, is hereby authorized to construct such dam at such height as will raise the waters of Rainy Lake to high-water mark; *Provided*, That said dam shall be furnished with such openings or gates or wasteways as will carry the waters of the river at flood stage without raising the water higher than it would rise in the natural condition of the stream: *And provided further*, That nothing in this act contained shall be construed as relieving the Koochiching Company, its successors or assigns, from liability for any damage inflicted upon private property by reason of the raising of the waters of the lake, as aforesaid.

SEC. 3. That this act shall take effect and be in force from and after its passage.

Approved, June 28, 1902.

[Chapter 797.]

AN ACT Relating to a dam across Rainy River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Rainy River Improvement Company, a corporation organized under the laws of the State of Minnesota for the improvement of the navigation of Rainy River and Rainy Lake, and its successors and assigns, upon filing with the Secretary of War proof satisfactory to him of its succession to the rights and privileges granted to the Koochiching Company by the following acts of Congress, namely: Chapter two hundred

and thirty-eight of volume thirty of the Statutes at Large, an act permitting the building of a dam across Rainy Lake River approved May fourth, eighteen hundred and ninety-eight; chapter three hundred and forty-six of volume thirty-one of the Statutes at Large, an act to amend an act entitled, "An act permitting the building of a dam across Rainy Lake River," approved May fourth, nineteen hundred; chapter thirteen hundred and five, volume thirty-two of the Statutes at Large, an act relating to the construction of a dam across Rainy River, approved June twenty-eighth, nineteen hundred and two, shall have the right, subject to the restrictions, conditions, and terms of said several acts, to construct and maintain the dam provided for therein, at such height as the Secretary of War may approve: *Provided*, That such dam shall be completed on or before July first, nineteen hundred and eight.

SEC. 2. That upon filing the proof of its succession to the rights of the Koochiching Company, and the approval thereof by the Secretary of War, that officer shall issue to the Rainy River Improvement Company a certificate of such approval.

SEC. 3. That the right to alter, amend, or repeal this act is hereby expressly reserved.

Approved February 25, 1905.

[Chapter 194.]

AN ACT Extending the time for the construction of a dam across Rainy River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Rainy River Improvement Company, a corporation organized under the laws of the State of Minnesota as the successor to the rights and privileges heretofore granted to the Koochiching Company under the following acts of Congress, namely: Chapter two hundred and thirty-eight of volume thirty, Statutes at Large, entitled, "An act permitting the building of a dam across Rainy River," approved May fourth, eighteen hundred and ninety-eight; and of chapter seven hundred and ninety-seven of volume thirty-three, Statutes at Large, entitled, "An act relating to a dam across Rainy River," approved February twenty-fifth, nineteen hundred and five, and of the various acts and provisions therein recited amending said act approved May fourth, eighteen hundred and ninety-eight, and further subject to the restrictions, conditions and terms of all of said acts, is hereby authorized to construct and maintain a dam across Rainy River, Minnesota, at the place designated in said acts, in accordance with the provisions of the act entitled, "An act to regulate the construction of dams across navigable waters," approved June twenty-first, ninteen hundred and six, so far as the same shall be applicable thereto: *Provided*, that said dam shall be completed on or before July, nineteen hundred and eleven.

SEC. 2. That the right to alter, amend, or repeal this act is hereby expressly reserved.

May 23, 1908.

The survey of the State lands involved in this matter, as shown by auditor's certificate referred to (Appendix D), were made in the years 1881, 1882, 1883, 1891, 1896, and 1899. The surveys were made by Government surveyors, acting under instructions issued by the Department of the Interior. There were two sets of instructions, one appearing in the manual of 1868 and the other in the manual of 1894. In the 1868 instructions reference is made to "low-water mark," and in the 1894 instructions reference is made to "high-water mark." It has been contended that the surveys made prior to 1894 were upon a different basis than those made subsequent to 1894, because in one instance the words "low-water mark" were used and in the other instance the words "high-water mark" are employed. This contention is not supported by the facts, nor even by the instructions themselves when the same are examined in their entirety.

On page 46 of the manual of 1868 it appears that instructions are given for the running of meander lines "along the margin of the water." On page 47 thereof instructions are given "not to mistake

the margin of bayous or the borders of the overflowed marshes or bottoms for the true river mark." On page 49 thereof instructions are given "requesting a description of the soil, timber, and depth to which the bottoms are subject to overflow."

In the light of the foregoing any contention that under the 1868 instructions the meander lines were placed at actual low-water mark is absolutely untenable. The margin of the water, being the language used in the instructions to the effect that "meander lines are to be run along the margin of the water," in the common acceptation of the term, is the line of demarcation as indicated upon the surface of the land where the water has stayed for such a period of time as to wrest it from vegetation. That is what is known as "high-water mark," as defined by the Supreme Court of the State of Minnesota in the case of In re Minnetonka Lake Improvement Co. (56 Minn., 513–522), often before referred to in other arguments.

By reference to the testimony of State Engineer Berg, on page 47 of the last preliminary report, and also on page 29, and the testimony of Mr. Ogaard on pages 86 and 87, it will be seen where these meander lines were established in the original Government survey, as shown by the notes in the United States land office; also see the testimony of Mr. Ogaard, who made the survey himself, as to where he placed the posts and the meander lines. So I think it is safe to say that an examination of the entire record will indicate that the State is right in its contention that the meander line as shown on the Government plats was practically high-water mark and the line above which we are entitled to have compensation if the level is established above the normal, natural level.

Mr. MIGNAULT. You say the Government meander line was at what level?

Mr. HILTON. I could not tell you that, Mr. Commissioner, but I think it appears in the testimony of these witnesses.

Mr. SAMUELSON. From 489 to 492 is the testimony of Mr. Berg and some of the other engineers.

Mr. HILTON. I think Mr. Ralph's testimony made it run from 489 to 493.

Mr. ROCKWOOD. I think some were higher than that.

Mr. HILTON. But wherever that level was, it can be determined by the commission reasonably accurately—at least, as far as this proceeding is concerned—from the testimony; and it is important, of course, to know where to start from when you begin measuring land that you are to compensate for. That is why I call attention to it.

Mr. MIGNAULT. My impression was that the engineers found that high-water mark on Rainy Lake was approximately 495. I may be mistaken, but that is my impression of it.

Mr. HILTON. My recollection does not corroborate that.

Mr. TAWNEY. Well, the report shows it, and that is the best evidence.

Mr. HILTON. There were prepared and introduced in evidence on behalf of the State of Minnesota two exhibits, to wit: Exhibits F and G, in which there appear the number of acres which would be flooded at the various proposed levels and the value of such lands as found by the State appraisers, such values being shown on Minnesota Exhibits A1 and B1. These exhibits, as I read them, show that at level 498 in the Rainy Lake and Rat Root River districts there would be 4,791 acres flooded of a value of $27,289, and a timber value of $550.

At level 499 in these districts there would be 5,110 acres flooded, with a valuation of $29,172, and a timber valuation of $650.

At 500-foot level in this district there would be 5,620 acres flooded, of a valuation of $32,102, and a timber value of $1,300.

When reference is made to the various levels it is meant that if the waters in the lake and its tributaries in the district in question are raised to these various levels, then the results referred to would follow.

In the Kettle Falls district, if the level is raised to 510, there would be 3,150 acres flooded, of a valuation of $16,743.80, with a timber valuation of $2,260.

If the level should be 515, then the number of acres flooded would be 5,958.6, of a value of $27,720.80, and with a timber value of $7,320.

In this district, if a level of 510 is considered, then there would be 2,274.72 acres damaged, because it would be deprived of drainage, such lands being of the value of $11,373.63, with a timber value of $2,350.

If a level should be maintained at 515 in this district, the number of acres that would be damaged on account of inability to be drained, would be 7,057 acres of a value of $38,913, and with a timber value of $3,675.

Mr. MIGNAULT. In valuing these lands I presume you take the minimum value according to your State constitution?

Mr. HILTON. I take the value according to these State appraisers. I have estimated from the figures as I found them in the exhibits that with a level of 500 in the Rainy Lake district, and a level of 515 in the Kettle Falls district, there would, of State land, be injuriously affected 18,535 acres, and of a valuation of $111,030.80.

Mr. POWELL. In making your estimates you put a valuation on the land. That means that the title to the land, without any easement, would go to the expropriating party.

Mr. HILTON. As I understand it, if these lands could be taken under the right of eminent domain, all that would be acquired would be the flowage right, simply an easement, and, of course, the measure of damages would be determined under the decisions of the State of Minnesota. The damages for an easement, which may be a perpetual easement, are just as great as though the fee were taken.

Mr. POWELL. Except the timber; it would not affect that.

Mr. HILTON. No. Our court has held that when the trial judge instructs the jury the proper thing for him to do is to charge the jury that although all the plaintiff is taking is an easement in the land, still as it may be perpetual, the measure of damages is just the same as though the fee were taken.

Another thing I wish to call attention to is that under the laws of the State of Minnesota these lands can not be taken without there being reserved to the State of Minnesota the mineral rights. Whether there are any minerals in these lands or not, I do not know, but in all these sales that the State auditor conducts pursuant to the constitution of the State there is always a mineral reservation.

Referring again to Minnesota Exhibit C, which was the exhibit giving a list of sales that were made, I have checked the same over and found sections in the same township and range as certain lands that it is claimed here will be damaged by this overflow. I have

done this for the purpose of ascertaining whether or not any sales had been made in these very identical sections. Of course, all the land is in the same neighborhood, but I find that in township 71, range 23, section 36, lands were appraised at $6 an acre by the appraisers, as indicated in Minnesota Exhibit A1. Lands were sold in that section in 1910 for $6.50 an acre; three pieces at $5 an acre; two pieces in 1915 at $5 an acre; one piece in 1910 at $5 an acre; two pieces in 1908 at $5 an acre; one piece in 1909 at $5 an acre; and one piece in 1911 at $6 an acre.

In section 34, township 70, range 23, the land was appraised at $5 an acre by the appraisers and two pieces were sold in 1913 at $5 an acre. In section 33 of the same township and range the appraisers placed a valuation on the land of $7 an acre. In 1904 one piece was sold at $7 an acre, and in 1915 three pieces were sold at $7 an acre. In section 23 in this same township and range the appraisers placed a valuation on the land of $5 an acre, and one piece was sold in 1911 at $5.

In township 69, range 23, section 4, the land was appraised at $5, $6, and $7 an acre. Two pieces were sold in 1914 at $7 an acre. In section 9 of this same township and range the appraisers placed a value on the land of $5, $6, and $7 an acre. Seven pieces were sold in 1915 at $7 an acre.

In township 69, range 23, section 10, the appraised valuation is $7 an acre. Two pieces were sold in 1914 at $7 per acre and six pieces in 1916 at $7. In section 4 of this same township and range the appraisal values were $5 and $7 an acre. Four pieces were sold in 1914 at $7, three pieces in 1915 at $7, one piece in 1915 at $6, and one piece in 1915 at $5 an acre.

That simply shows that in checking up in identically the same sections the lands were actually sold for what these appraisers later on fixed as the price that they thought the remainder of the lands in the section was worth.

Mr. TAWNEY. Those were all public sales that you refer to?

Mr. HILTON. They were all public sales. There can be no other kind of sales of State lands.

Mr. POWELL. You do not ask us, in imposing damages, to consider the forcible taking of land?

Mr. HILTON. No; but the State is willing to accept the generous offer made by my friends Rockwood and Campbell—that 25 per cent additional be added to what the property is really worth, and, considering that all we have asked has been so conservative and fair the State would have no objection to sharing in that offer.

From the quotations heretofore made, both from the constitution and statutes of the State of Minnesota, it has been made to appear that no State lands can be disposed of by sale or otherwise, or taken from the State by condemnation or other proceedings for any less than the minimum price of $5 per acre. The price fixed by the State appraisers, appointed and acting in accordance with law, under oath, places the lowest valuation at $5 per acre, in many instances at a price higher than that, such higher prices being as appears by Minnesota Exhibits A1 and B1, $6 and $7 per acre, and in a very few instances at $8 per acre, and in two instances at $10 per acre. In the light of the personal knowledge of the commission and of the

testimony introduced at these hearings, the valuations of the appraisers must be conceded to be very conservative and reasonable.

The State contends that as it is the owner of these lands the same constitute its absolute property, dedicated to specific uses, the proceeds therefrom going to the school and institution funds of the State; that these lands can not and should not be taken from it for any less compensation than the minimum price fixed by the State constitution and statutes. The State of Minnesota is not desirous of disposing of these lands and prefers that the waters of the lakes and tributaries in question be allowed to remain at their normal state. If the state of nature is not to be maintained, and these lands are to be destroyed by the raising of the waters in question, it would seem that there should be no question but that the compensation to be paid should be the very moderate appraised valuation, and no land taken for less than $5 per acre. If the waters are raised above the normal level and the damage in question follows, in the interests of navigation and development of power those interests should be willing and as a proposition of law will be obliged to pay the prices above referred to. This is true, irrespective of the relative importance of the navigation and power interests. The power companies do not possess the right of eminent domain and could not, by exercise of that power, obtain these lands at any figure; nor could they at a public sale acquire the same for the reason that no more than 320 acres can be acquired by any one individual or party. It can not be that these power interests can receive the benefit of the intervention of the two Governments and acquire the benefit of the destruction of these lands at a figure less than they could acquire the same for if they had the right of eminent domain. In passing, it may be noted that the testimony clearly shows that by far the greatest benefit and, in fact, almost the entire benefit to be derived from the raising of these waters will be to the power interests and not to navigation interests.

The State of Minnesota is one of the sovereign States of the Union, it is the absolute owner of this property, and the people of the State, in the adoption of its constitution and by its representatives in legislature assembled, have declared that no State lands shall be disposed of at less than $5 per acre. Irrespective of the question as to the power of the United States to take these lands for less than that sum, for some great public Federal interest, it is contended that the United States of America and the Dominion of Canada, acting together, can not take these lands at a price less than the minimum fixed by the constitution and statutes of the State of Minnesota, particularly when the principal benefit to be derived from such taking is in the interests of private power companies.

Right here I might say that in a decision of the Supreme Court of the State of Minnesota, in which it was held that State lands might be taken from the State under the power of eminent domain, the court said that a condemnation proceeding had all the elements of a public sale; and it was also held in that decision that all the rights of the State were amply protected. For instance, the right of the State to the mineral reservation is protected.

Mr. MIGNAULT. Not in the case of a railroad, however.

Mr. HILTON. No; not in the case of anybody else. Taking State land under the right of eminent domain, the minerals are reserved to the State. My contention is this, that the decision also holds that the rights of the State, in so far as the minimum price is concerned, are also protected when the lands are taken from it under the right of eminent domain.

Mr. POWELL. I suppose the legal situation is this, that all that is taken is an easement, and when the easement lapses the title is perfected again.

Mr. HILTON. Perhaps it is not necessary to discuss that here, particularly, but supposing a company or a railroad that had the right of eminent domain took a piece of State land and all it acquired was an easement in it, and a valuable mine was discovered on the land, I do not think there is any question at all but that the State could go ahead and develop and use its mine.

Mr. MIGNAULT. Assume this situation: An easement on the land is acquired for purposes of flowage, and subsequently minerals were discovered on the land actually flooded. What would be the legal effect?

Mr. HILTON. I have not examined that question, but my offhand judgment would be that the State would have a right to take possession of that land and use it for mining purposes.

Mr. MIGNAULT. Would it have the right to require the level of the lake to be reduced so as to have access to the land?

Mr. HILTON. I would not hazard an opinion as to that, Mr. Commissioner. It might not be necessary to reduce the level of the lake; a dike might be built. As a matter of fact, there is a great deal of mining in the State of Minnesota under the bottom of lakes.

Mr. MIGNAULT. The land might be tunneled?

Mr. HILTON. Yes.

Mr. MIGNAULT. The two rights could be exercised without disturbing one or the other.

Mr. HILTON. Yes; likely they could. In this connection I might say that in the trial of condemnation cases in court the owner of the land is a competent witness to testify as to the value of his properties. It is not necessary for him to prove his competency by showing that other sales have been made or that he knows of other sales, but, as I understand the decisions, the owner of the land is entitled to go upon the stand and testify as to the value that he places upon his land, in order that the jury may take that into consideration. These proceedings are somewhat akin, perhaps, to the taking under the great right of eminent domain, and I offer this suggestion: The State of Minnesota is the owner of these State lands that we are here considering. The people of the State, by adopting the constitution of the State, placed the minimum price at which these lands could be taken as $5 an acre. The people of the State of Minnesota, in legislature assembled, and being there represented by the duly constituted men selected for that purpose, again declared, by the statute, that $5 an acre was the minimum price for which these lands could be taken. Again, it appears here, from the testimony and the exhibits, that three sworn officials were appointed, and they appraised the lands at these figures. There is not one particle of evidence in the record anywhere showing that

the lands are worth less than the prices we have here fixed, excepting the testimony of Mr. Ralph at International Falls, in which he said that the lands above 496, on Rainy, and above 508, in the Kettle Falls district, were worth $5 an acre, but below that they were not worth anything. That is the statement given by him as to his conclusion in the matter. In the light of all the testimony, and particularly in view of the moderate price which we have placed on the lands, it would occur to me that the question of valuation would not necessarily give the commission any particular trouble.

Mr. PREUS. When Mr. Ralph made that statement was the he summoned to appear on behalf of the State or on behalf of one of the power companies?

Mr. HILTON. He appeared there, as the evidence shows, as a witness for the power company.

Mr. KEEFER. And that testimony related to Rainy Lake.

Mr. HILTON. Yes.

Mr. KEEFER. At the Warroad hearings he appeared on behalf of a private owner.

Mr. HILTON. I understand so. But I am simply addressing my remarks to the Rainy Lake country.

Commissioner Mignault has just suggested that I consider the question as to whether the commission would have a right to take into consideration the condition of the waters in Rainy Lake and its tributaries at the time they visited the lake, such waters then being under control by means of the dam at International Falls.

Mr. MIGNAULT. I would say at the date of the reference with this dam constructed and about to be put in operation or actually in operation.

Mr. HILTON. If it be a fact that at the time of the reference the dam was in and controlling the water—which I do not concede—and if it be a fact that you found the waters when you visited International Falls under control by means of the dam, I think that would by no means relieve this commission of its responsibility of determining the question as to the amount of damage that had been done and would be done to lands flooded above the normal natural level, because, as I indicated some time since, that even though the dam is there there is nothing to guarantee that it will always remain there; that the owners will not themselves take it out; or that the State or some one else may not interpose by legal proceedings and compel its abatement as a public nuisance. Then, as I indicated before, there is the question of whether they had the legal authority to install it in the first place, and whether they have done it within the rights attempted to be conferred upon them. We contend that they are trespassers, that the dam has only been in existence a little while anyhow, and all our computations as to acreage and values have been predicated upon the proposition that we were entitled to the land down to that meander line which we insist was high-water mark. There should be no question as to what our position is in the matter. Mr. Rockwood, as he indicated on the first day of these hearings, has a different idea with regard to it, but he concedes that it is a question of dispute, and what this commission should do in its recommendations to the two Governments is to suggest that the two Governments settle all disputes.

Mr. MIGNAULT. I would like to hear the other interests on this point, because I may frankly say that that view suggests itself to my mind as being a reasonable one.

Mr. MAGRATH. The second question of the reference reads as follows:

> If a certain stated level is recommended in answer to question 1, and if such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake, when maintained at such level, overflow the lowlands upon its southern borders, or elsewhere on its border, and what is the value of the lands which would be submerged?

How does that language enable you to say that the land should be valued on waters other than the Lake of the Woods?

Mr. HILTON. Would it not, Mr. Commissioner, follow that if the Rainy Lake Basin lands that will be damaged by submerging, in order to maintain a given level on the Lake of the Woods and its tributaries, are not to be compensated for by the Governments on your recommendations; then, you have no right, under the reference, to do anything to or recommend any levels for Rainy Lake waters? If you are confined to the Lake of the Woods as to compensation for damages, are you not confined to the Lake of the Woods as to raising levels and creating damages?

Mr. MAGRATH. I am not disputing the desirability at all; I merely wanted to get your views as to the interpretation of that paragraph.

Mr. HILTON. If you will recall, at a meeting had at International Falls in September, a question was raised—I think not only by myself but by others—as to whether, under the instructions that were given and the words of the reference, the Rainy Lake country was to be considered at all, and for that reason we were not prepared at that time to furnish the testimony or information for this commission. The record of the International Falls proceedings in September, 1915, will show that the reason we were not at that time prepared was because we did not understand that the Rainy Lake country was at all to be affected by the language of this reference. The commission was of the opinion, as I understood it, that it did cover any waters that might flow into or out of the Lake of the Woods.

Mr. MAGRATH. My reading of section 3 makes it clear that we must examine all the waters to see what control of those waters are desirable in order to get the best results. But I do not see that it is altogether clear that, in addition to determining what levels will give the best results, we are also called upon to say what the value is of the submerged lands on Rainy Lake.

Mr. HILTON. I would say offhand, that is seems to me the language of this reference, if it is reasonably liberally construed, would give the commission ample power at least to so report values and make recommendation to the two Governments.

Mr. MIGNAULT. May I suggest this, Mr. Hilton, that if it is necessary for the regulation of the levels of the Lake of the Woods to flood lands along Rainy Lake, is it not reasonable that the damage or compensation necessitated by reason of this flooding of lands on Rainy Lake should be considered by the commission?

Mr. HILTON. I think so.

Mr. MAGRATH. I quite agree with that. I do not want to be misunderstood at all.

Mr. MIGNAULT. Would not that result from the concluding portion of paragraph 3 of the reference?

Mr. HILTON. The last portion of paragraph 3 of the reference refers to the "adequate protection and development of all the interests involved on both sides of the boundary, with the least possible damage to all rights and interests, both public and private, which may be affected by maintaining the proposed level." It occurs to me that it would be a technical and extremely strict construction of this reference to say that you could not arrange for compensation in the Rainy River district.

Mr. POWELL. Take the word "advisable." Instead of reading the latter part of section 3 read the earlier portion.

Mr. HILTON. The first part of section 3 reads as follows:

> In what way or manner, including the construction and operation of dams or other works at the outlets and inlets of the lake or in the waters which are directly or indirectly tributary to the lake or otherwise, is it possible and advisable, etc.

Mr. POWELL. How can you make a dam without providing storage? That follows, does it not?

Mr. HILTON. Naturally.

Mr. POWELL. If you provide storage you must overflow land.

Mr. HILTON. Certainly.

Mr. POWELL. And there is thrown on us the question of the advisability of doing so. Is cost an element in the advisability?

Mr. HILTON. I should say so.

Mr. SAMUELSON. The general treaty provides for the same thing, irrespective of the reference.

Mr. POWELL. The point that Mr. Magrath raises weighed with me a little; first, because there is a specific mention of valuing lands there, and under ordinary circumstances some significance would be attached to its having been left out in the next clause; but you can not report on the advisability of it without knowing what it is going to cost. If it costs $3,000,000, it might not be advisable; if it costs $300,000, it might be advisable.

Mr. HILTON. It would seem, as to values of State land, however, that it would not be necessary to argue or insist upon the question of absolute legal right and authority, for two great Governments, in dealing with a sovereign State of one of them, would and should act in that manner which is becoming to and fitting for such high contracting parties, and would not and should not override the reasonable and expressed declaration of the people of the sovereign State.

The action of the people of the State in adopting the constitution and the action of the legislature in fixing the minimum price at $5 per acre is entitled to the highest consideration, and there can not be impugned to either any motive other than the highest. The smallness of the minimum price fixed is in itself indicative of the fairness, justice, and equity that dominated the entire transaction. No one can justly impugn the motives of the people and the legislature of a sovereign State in proceeding as was done in the State of Minnesota; much less will there be such impugning by this commission, representing, as they do, two great Governments of the world.

In Minnesota the law would seem to be that the title of the riparian owner is to the low-water mark. This was decided as early as the case of Schurmeier *v.* St. Paul & Pacific Railway Co. (10 Minn., 59). In the syllabus of this case we find:

A tract of land bounded on the Mississippi River extends at least to the low-water mark. This rule applies to grants made by the Government, as well as those made by individuals, notwithstanding the river is a public highway.

This case was taken on a writ of error to the Supreme Court of the United States and is reported as Railroad Co. *v.* Schurmeier (74 U. S., 272). The Supreme Court of the State of Minnesota was affirmed. At page 287 the Supreme Court of the United States said:

Proprietors bordering on streams not navigable, unless restricted by the terms of their grant, hold to the center of the stream, but the better opinion is that the proprietor of lands bordering on navigable rivers, under titles derived from the United States, hold only to the stream, as the express provision is that all such rivers shall be deemed to be and remain public highways.

The court does not hesitate to decide that Congress, in making distinction between streams navigable and those not navigable, intended to provide that the common-law rules of riparian ownership should apply to lands bordering on the latter, but that the title to lands bordering on navigable streams should stop at the stream and that all such streams should be deemed to be and remain public highways.

Although such riparian proprietors are limited to the stream, still they also have the same right to construct suitable landings and wharves for the convenience of commerce and navigation as is accorded riparian proprietors bordering on navigable waters affected by the ebb and flow of the tide.

In Morrill *v.* St. Anthony Falls Water Power Co. (26 Minn., 222) the Supreme Court of the State of Minnesota approved the doctrine theretofore laid down to the effect—

That the right of riparian owners is wholly a matter for the State to determine the extent of its own rights and that riparian owner has the fee to low-water mark.

In Lamphrey *v.* State (62 Minn., 181) the syllabus well states the conclusions reached by the court, as follows:

When the United States has disposed of the lands bordering on a meandered lake by patent without reservation or restriction it has nothing left to convey, and any patent thereafter issued for land forming the bed or former bed of the lake is void and inoperative.

Where the United States has made grants without reservation or restriction, of public lands bounded on streams or other waters, the question whether the lands forming the beds of the waters belonging to the State, or to the owners of the riparian lands, is to be determined entirely by the law of the State in which the lands lie.

The same rules govern the rights of riparian owners on lakes or other still waters as govern the rights of riparian owners on streams. Hence if a measured lake is "nonnavigable" in fact, the patentee of the riparian land takes the fee to the center of the lake; if the lake is "navigable" in fact, its waters and bed belong to the State, in its sovereign capacity and the riparian patentee takes the fee only to the water line, but with all the rights, incident to riparian ownership on navigable waters, including the right to accretions or relictions formed in front of his land by the action or recession of the water.

The case of Hardin *v.* Jordan (140 U. S., 371) holds that:

Grants by the United States of its public lands bounded on streams and others waters, made without reservation or restriction, are to be construed, as to their effect, according to the law of the State in which the lands lie.

Meander lines as shown by Government surveys of lands bounded by a lake or river are merely for the purpose of ascertaining the quantity of land to be surveyed and do not constitute the boundary. The water in the real boundary.

In Ames *v.* Cannon River Manufacturing Co. the court held as shown by the syllabus, as follows:

A riparian owner has no right to maintain a dam at such height as to raise and set the water back upon an upper proprietor at the ordinary stage in the stream—construing the term "ordinary stage" to include its stage in such rises, or high water, as are usual, ordinary, and reasonably to be anticipated, but not to include its stage in such extraordinary freshts as can not be reasonably anticipated at particular periods of the year. (See Dorman *v.* Ames, 12 Minn., 457.)

In Veise *v.* District Court (83 Minn., 464) the court referring to the case in Fifty-sixth Minnesota, 513, uses the following language. The principle in that cases was laid down that "high-water mark" is a mark—

coordinate with the limit of the bed of the water; that only is to be considered the bed which the water occupies sufficiently long and continuously to wrest it from vegetation and destroy its value for agricultural purposes. * * * It is the point up to which the presence and action of the water is so continuous as to destroy the value of the land for agricultural purposes by preventing the growth of vegetation, constituting what may be termed an ordinary agricultural crop—for example, hay.

In Weiner *v.* Boom Co. (28 Minn., 534) the court held that the construction and maintenance of a boom across the Mississippi River which invaded the land of a riparian owner, by superinduced additions of water, earth, logs, and other material, so as to effectually destroy and impair its usefulness—

was not a mere consequential injury, but amounted to a taking of the property within the meaning of Article I, section 13, of the constitution of tht State; and that defendant had no right to thus use or take plaintiff's property without his consent, without first paying compensation therefor.

In Erdman *v.* Power Co. (112 Minn., 175) the Supreme Court, following Ames *v.* K. R. Mfg. Co. (27 Minn., 245), held that—

By high-water mark is meant those point along the shore where water arises to such a height as may reasonably be anticipated, but it does not includ such extraordinary freshets and floods as can not be anticipated.

From these excerpts I conclude:

(1) That the title of the riparian owner on navigable waters extends to the low-water mark, but that his title is not absolute, except to ordinary high-water mark. That as to the intervening places, his title is limited or qualified by the right of the public to use the same for the purpose of navigation or other public purposes.

(2) That the ordinary high-water mark above which his title is absolute, is to be determined, not from the meander lines established by the United States Government, but from an actual inspection of the banks, and in determining from that inspection the high-water mark, the definition of "high-water mark" given by the Minnesota Supreme Court in the Minnetonka case, 56 Minnesota, must be employed. That, as a matter of fact, in so far as the lands here involved are concerned, the Government meander line, as established by the Government surveyors and evidenced by the meander corners, was high-water mark.

It is fortunate that with the many questions of fact that the International Joint Commission will be required to determine in this investigation, the question as to acreage of State lands that will be affected, is one that will require no particular consideration. There is

a practical agreement between the consulting engineers of the commission and the State engineers as to the quantity of land that will be affected by the raising of the waters in question above their normal, natural level. It proves conclusively not only the capability, but the carefulness as well, of the consulting engineers and the State engineers. The commission therefore in determining the amount of damage to be sustained by the State, can take the figures practically agreed upon as to acreage, and figure the damage by using the appraised valuation per acre of the various tracts in question.

It would seem, then, that as far as the State of Minnesota is concerned, in its proprietary capacity, ample evidence has been submitted showing the number of acres that will be injuriously affected. We have also furnished testimony, practically undisputed, as to the value of those lands per acre, and its reasonableness must certainly appeal to anyone. We have gone even further than that; we have done the multiplying and have computed just what the damage will be at any particular level that the commission may see fit to recommend.

I will say in regard to proposed levels, that the State has no suggestions to make. That is a matter for the determination of the two Governments, upon the recommendation of this commission, depending upon which will be the most advisable and most advantageous. What the State in its proprietary capacity is asking for is that whatever damage may be done to it at a given level it be compensated for in the reasonable amount that is claimed.

There is one other thing I would like to say—and I speak not only for myself and the State, but also for State Auditor Preus, who is ex officio land commissioner and has charge of all these State lands—and that is that whatever is done we wish to have the matters settled promptly and for all time, no questions remaining undetermined; that some arrangement be made whereby all the riparian owners may be compensated and that, too, at once and without any case having to drag its tortuous way through the various courts, because justice delayed is robbed of most if not all its effectiveness.

I think that concludes about all I have to offer, except a personal word on behalf of the State, Mr. Preus, and myself.

Mr. Magrath. Just before you come to that, what would happen in the case of lands along those waters taken up hereafter? Would there be other claims submitted on account of damages?

Mr. Hilton. If I understand you correctly, my answer to your question would be yes; that is, if lands are taken pursuant to your recommendation up to the 510 level in the Kettle Falls district, or up to the 500 level in the Rainy River district, and you compensated for the damage that those levels would cause; then, if later on it was proposed to raise the control higher and you flooded lands farther back, this same question would be up again.

Mr. Magrath. But if we recommend a certain level and your demands are met, would that exhaust the State's claim for damages along those waters?

Mr. Hilton. At that level, excepting the mineral feature of it. The mineral reservation would still be there.

Mr. Magrath. But with respect to parties acquiring from you afterwards lands bordering on the lake, though they might not be included in your lists, would they have claims for damages in con-

nection with the water being held at the level we recommend, or would this wipe out all your claims?

Mr. TAWNEY. Mr. Magrath, I think you are asking whether these lists comprise all of the State lands affected by any level of Rainy Lake. If all the lands are included, the State would then have no other land to alienate hereafter.

Mr. HILTON. No; I think not. Did Mr. Tawney express your idea, Mr. Magrath?

Mr. MAGRATH. My idea was this: If we recommend a certain level and if your demands are met in respect to that level, will that wipe out any claims that may possibly be made by you or those acquiring from you lands surrounding that lake?

Mr. HILTON. As far as I know, yes; except the mineral reservation. I think in these lists are included absolutely all of the State lands that will be affected at these various levels, and if we are compensated for that damage, then the acreage we have to sell is that much less.

Mr. MAGRATH. Do those lists cover all the lands that you have fronting on those waters?

Mr. HILTON. That is the understanding, and I think they do without any doubt. They were prepared for that purpose.

Mr. POWELL. When you sell the land you sell it subject to the seizure?

Mr. HILTON. Yes; and we would not charge a man any price per acre for any of that land that we had already been compensated for.

I wish to make a personal reference before closing, speaking not only on behalf of the State of Minnesota and myself, but also on behalf of State Auditor Preus. I have been, as he has been, particularly interested in following the work of this commission since we first met you in September, 1915, at International Falls. We both have been impressed not only with the ability and integrity of the various members of the commission, but also with the idea that you have had but one purpose in mind, and that was to carry out the manifest intent of the treaty under which the commission was appointed, and particularly the reference under which you are now working. You have spared neither time nor expense nor work in getting information, and have been extremely courteous, not only to the State, but to all persons who have appeared before you. You seem to have had but the one object in view—to get all the information you could so that absolute justice might be done to all parties. I would, if I could, employ equally eloquent language to that used by my eminent friend Campbell when he closed his address to you. I can but say that I have a hearty amen to offer to the beautiful and just tribute he paid you.

If at any time in the future the State of Minnesota or its legal representatives can be of the slightest aid to the commission in its work and in its endeavors, all that will be necessary is simply an expression on your part of a desire therefor.

Mr. GARDNER. Before taking a recess, I would say that a request has come to me from Congressman Lindbergh, asking that he may be permitted to address the commission for about five minutes, and I have said that we would hear him some time this afternoon.

(Thereupon, at 12.30 o'clock p. m., a recess was taken until 2 o'clock p. m.)

AFTER RECESS.

The commission reconvened at the expiration of the recess.

Mr. GARDNER. Gentlemen, you will please come to order. Congressman Lindbergh is present and, as I understand his time is limited, we shall be glad to hear from him now.

STATEMENT OF HON. CHARLES A. LINDBERGH.

Mr. LINDBERGH. Mr. Chairman and gentlemen of the commission, I have some reluctance in stepping in here just at a time when somebody else may be occupying the floor, but I shall take only a few moments.

I represent in Congress the sixth congressional district of Minnesota, part of that district extending up to the Lake of the Woods. I spent a few days on the south shore of the lake last summer and tramped around over some of the country affected by the waters of the lake and had a meeting there with the settlers who were affected by those waters. They wished me, when the opportunity presented itself, to bring one fact particularly before your honorable commission. They would rather that your commission, when the time comes that you have jurisdiction over that question, as you probably will have at some time or other, determine what the damages are than to have it determined in court. Most of them are people of very limited means. They went there and settled upon these lands practically without any means whatever.

Mr. MAGRATH. Are you referring to the Zippel Bay country?

Mr. LINDBERGH. Yes; and to the territory for some distance up and down the lake in that proximity. They do not want to be forced to go into court to determine their rights. They think, as I do, that this commission will be in a better position when the proper jurisdiction is given—if you do not already have it—to determine what the damages are, and they feel as though the commission would be liberal in the allowance of damages. They have been in there waiting and expecting the questions involved to be settled, and they have not known hardly what to do. Some of them have gone on and improved their lands and then they found themselves flooded out just at the time when they expected to get results from their improvements. That was particularly true last summer. They feel that the commission should be liberal in allowing them damages, and they feel also that a lump sum could be allowed ultimately that would probably involve less expense all around and do greater justice to the parties belonging to the two countries.

That particular point they asked me to bring before your commission when the opportunity presented, and that is why I appear here. I am not going to discuss any legal questions involved here, because you have had them presented to you and you understand them as well as I.

I am unable under the circumstances to present them to you in any better shape than they have been presented.

One other point occurs to me that effects some of the people mentioned there, and that is this: Any obstruction to the outflow from the lake they feel would affect their lands at some time or other, and their rights ought to be considered with reference to the natural

rights as they would have been if there had been no obstruction whatever: that is, the rights as they existed under the original natural conditions.

They believe that an obstruction across the outflow from the lake changes the conditions of the elevation of the waters in the lake, even when that obstruction is there during low water times, because it is an obstruction to the outflow and, in a certain sense, would affect the stage of water at all periods of the year. They asked me also to call to your attention to that fact. Those are the only two points that they wanted me to get before your commission as representing their individual lay view, so to speak, in that section of the country. They have been damaged very materially, but you are not now, as I understand, inquiring into the question of damages, especially the detailed damages. They are pretty well discouraged there, and, of course, want to get their rights adjusted as quickly as possible, but there is no need of my discussing that point, because you are acting with diligence and as rapidly as you can considering the importance of the various questions involved that are before you.

With those few remarks, I think that there is nothing left that I need say. Of course, if there are any questions that you wish to ask, I would respond the best way I could.

Mr. GLENN. We have no power under the present reference to divide this among the different farmers or persons injured.

Mr. LINDBERGH. I understand that, but they did not know but what the commission's recommendations would have something to do with the powers that you would acquire in the future, and they are anxious that the commission should retain the jurisdiction of that question. They think it would be settled at less cost to them and with less delay, because when they once get into court they have to employ attorneys and go through a long procedure. They feel as though they would like to have the jurisdiction remain with this commission, and that is what they wanted me particularly to impress upon you.

Mr. MIGNAULT. I understood from Congressman Steenerson that if a lump sum were determined upon as compensation due to the settlers and that amount were handed over to the Government it would be distributed by Government agency to the different claimants. I would like to know what you have to say as to that?

Mr. LINDBERGH. Although I was not present when Mr. Steenerson was speaking, I know practically what he stated here, and I am thoroughly in accord with the statement which he made. I believe that that is the real way in which the damages could ultimately be settled to the best advantage.

Mr. MIGNAULT. That would relieve the commission from the duty of actually distributing the money.

Mr. LINDBERGH. That is my idea too, and I think that the commission would find a very unpleasant job if they had to distribute the individual damages.

Mr. POWELL. What do you think about the propriety of the two Governments conferring upon the commission jurisdiction to close the whole matter and be done with it so that these people would know where they are and know that speedily?

Mr. LINDBERGH. I think that is very desirable, because it would satisfy the people much better than any other method. The thing that they are particularly anxious for—and we all realize that—is

to get the anxiety off their minds and know where they are. So I think that is the best possible suggestion.

Mr. POWELL. If it leaves us simply with the facts we find as a diplomtic tribunal, goodness knows how long it would drag along. I think that they are thoroughly well satisfied that they would get justice at our hands and get it speedily.

Mr. LINDBERGH. I feel that way myself, and I am sure that the people that met with me—and they were with me off and on for four or five days—feel the same way about it. Especially since watching the proceedings here, I am more thoroughly convinced of that fact, and I am sure that I shall so represent it to the people.

Gentlemen, I thank you for your courtesy.

Mr. GARDNER. The commission is under obligations to you, Mr. Congressman, for appearing here and giving us the benefit of your views.

Mr. LINDBERGH. I do not think I have thrown very much light on the subject, except to express the particular wishes of the people in that locality.

Mr. GARDNER. Mr. Samuelson, if you are ready, we will hear you now.

ARGUMENT OF MR. JOHN E. SAMUELSON.

Mr. SAMUELSON. Mr. Chairman and gentlemen of the commission, when I came down I felt possibly that I had something to say upon the questions that were involved before your honorable body, but during the practically three days' session that has now taken place, and after listening to the able arguments that have been presented by various counsel, the subject has been left in such a condition that the questions that have not been touched upon are rather few. In fact, I am unable to see at the present time any question that has not already been touched upon by the various counsel.

The treaty that was entered into by the two high contracting parties was entered into by reason of the fact that there were certain controversies in regard to the boundary waters and to the boundaries themselves which could not be taken care of by the use of and in the course of the ordinary diplomatic relations between the parties, because the machinery was too cumbersome and required too great a time for the purpose of adjusting those questions. For that reason it was deemed proper to adopt some other means of adjustment, and about the only method that could be devised was to create this international joint commission to the end that questions pertaining to the international boundary between the two countries might be speedily adjusted as well as right in the use of the waters or that might in any way have effect upon them might be taken up by this commission and adjusted in such way that the people of both countries would be satisfied.

Take the heading of the proclamation, for instance. That tends to show, in a measure, the ideas that were in the minds of the two Governments at the time that this commission was created. It says:

> Whereas a treaty between the United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominion beyond the Seas, Emperor of India, to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the

rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provisions for the adjustment and settlement of all such questions as may hereafter arise was concluded, etc.

Now, the purpose seems to be a broad and comprehensive one. Then a little further on they say:

Being equally desirous to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier.

I do not know anything about the advisability of the raising of the waters of the Lake of the Woods. That is a matter that has been presented to you by eminent counsel. You have received testimony along those lines, and that is a question that you must primarily determine. I appear here for certain settlers along one of the waters that flow into and that will tend to maintain the waters of the Lake of the Woods, if it is deemed necessary by your honorable commission to raise those waters.

The parties whom I represent and their interests force themselves into an insignificant position, relatively speaking, when it comes to the larger and broader scope and the magnitude of the things that I have listened to here in reference to the development of the water power, not only on the American side, but also on the Canadian side. My people, that is, the people whom I represent, and myself are inhabitants of the country that is to be affected, and I do not want to be understood for one moment in anything that I may say as putting even a hair in the way of preventing a development of the magnitude that has been spoken of here. My only purpose is to see that justice is done to the men whom I represent.

The first time that I appeared before this commission, which was in September of last year at International Falls, I had merely casually read this treaty, and I had merely casually read the letter of reference that had been sent to me, presumably because I was the attorney for the settlers. At first glance I did not realize, I did not comprehend, the nature and extent to which it was the desire of this commission to go at that time, and in September, when I came before your commission I was reprimanded because of the fact that I was not in a position to present the facts that you had asked for at that particular time. I feel, however, that I was somewhat justified in not being prepared at that time, because the question has been raised by Commissioner Mignault as to whether or not we really came within the scope and the purview of the reference that had been made to the commission. Since that time I have given the matter more consideration and I feel absolutely satisfied that it is within the reference.

Not only that, but I want to say to this commission now that if that matter is not included in the reference that is now before you, I at this time, on behalf of the settlers whom I represent, call to your attention the condition of the dam at International Falls and ask your body to take official action in regard to the present condition of the waters in Rainy Lake and Rainy River above the dam at International Falls. I wish to call that matter to your attention at this time in your official capacity.

The treaty that was entered into by the two Governments was concluded in 1909. At that time certain acts of Congress had been passed, five in number, that have already been referred to by the assistant attorney general of the State of Minnesota. By those acts of Congress a corporation which was formerly known as the Koochiching Co. obtained the right and privilege to construct a dam across the Rainy River.

Mr. MIGNAULT. At what date, Mr. Samuelson?

Mr. SAMUELSON. The original act was approved on the 4th day of May, 1898. That act, by section 3, provided:

> That this act shall be null and void unless the dam herein authorized be commenced within one year and completed within three years from the date hereof.

The dam was not completed within that period of time, nor was any work done upon the dam, as a matter of fact; and on May 4, 1900, an act was passed extending the time to this company. That act, in part, reads as follows:

> That this act shall be null and void unless the dam herein authorized shall be commenced within three years and completed within five years after the fourth day of May, nineteen hundred and eight.

The dam was not constructed in accordance with that act.

On June 28, 1902, Congress enacted a law, section 2 of which provides:

> That the Koochiching Company, its successors and assigns, is hereby authorized to construct and maintain said dam, subject to the terms of said chapter two hundred and thirty-eight of volume thirty of the Statutes at Large, upon the plans now on file with the Secretary of War, or any modification of said plans which the Secretary of War may approve. The Koochiching Company, its successors and assigns, is hereby authorized to construct such dam at such height as will raise the waters of Rainy Lake to high-water mark: *Provided*, That said dam shall be furnished with such openings or gates or wasteways as will carry the waters of the river at flood stage without raising the water higher than it would rise in the natural condition of the stream: *And provided further*, That nothing in this act contained shall be construed as relieving the Koochiching Company, its successors and assigns, from liability for any damage inflicted upon private property by reason of the raising of the waters of the lake as aforesaid.

That is up to the natural high-water point. That is as far as the United States Government has at any time gone.

Mr. MIGNAULT. And as far as it could go.

Mr. SAMUELSON. As far as it could go, although my friend Mr. Rockwood here, I believe, has contended, and will contend again, that Congress had the right to give authority to the Secretary of War to raise it beyond that limit. In other words, it will be the contention of my learned friend here that Congress gave authority to the Secretary of War to approve the plans for the construction of this particular dam, and the mere fact of the approval of those plans by the Secretary of War, irrespective of the limitation that has been placed upon that congressional act, constitutes the high-water mark in Rainy Lake and in Rainy River. But I challenge that theory of my brother and say that Congress had no right; that it had no authority and no power itself, nor could it authorize the Secretary of War or anyone else to do so, because it had to do with international waters.

Mr. MIGNAULT. Is that the only reason, because it had to do with international waters, that it could not go beyond the high-water mark?

Mr. SAMUELSON. Not at all. Under the constitutional provisions as contained in our Constitution, the people living along that river, the people living along that lake, had an absolute right to have the waters maintained at their natural height that neither the Government of the United States nor the government of the State of Minnesota could change. This was a vested right that could not be changed without payment of just compensation to these settlers.

Now, then, prior to the time that this dam was actually constructed in accordance with these acts of Congress, the United States of America and the Dominion of Canada, through His Majesty the King of England, entered into a treaty, and by the terms of that treaty (article 3):

> It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto, no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions, and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission.

It was after the time that this treaty had been signed and ratified by the powers that this dam at International Falls was actually put into operation. At the time this dam was put into operation the Government of the United States, under the treaty, had no right to recognize or to countenance the raising of that water. The company that constructed that dam had absolutely no right to raise the waters beyond the high-water mark, absolutely none. Did that company make application to the International Joint Commission for the purpose of obtaining the authority necessary under this treaty? Not at all. They do not claim to have done so; they simply claim that they were there and in possession. These poor homesteaders whom I represent were up there in the woods. They could not help themselves. They could not drive the water off their lands the same as they could a lot of cattle. Those settlers were driven off their land. At the time that that treaty was entered into and prior to the time that this dam was closed so as to control the waters of Rainy Lake it is our claim that the normal level of the water, high-water mark, was then between 489 and 491. Since the time that they put the dam into operation and controlled the flow of water by this dam they have raised the level of the waters in Rainy River and Lake until to-day that level is about 497 and a fraction. In other words, they have cast about 6 feet of water onto the lands of these settlers.

Mr. GLENN. What does the consulting engineers' report fix as the high-water mark?

Mr. SAMUELSON. I do not believe that the engineers' report fixes the high-water mark. In the engineers' charts, which I have examined very carefully, they have drawn a blue line indicating what would be the high-water mark.

Mr. GLENN. What is the evidence to which you call especial attention as showing that the high-water mark was 491 prior to the building of the dam?

Mr. SAMUELSON. The testimony of Mr. Berg, the engineer employed by the settlers for the purpose of ascertaining the amount of land that was actually overflowed. The settlers who live there and

who have been flooded out, were able, by reason of their familiarity with their own land, to show to the engineer who was making this data just exactly where the high-water mark was. They could show the line of demarcation between vegetation and the point where the action of the water stood for such a length of time during the year as to wrest the land from any vegetable growth.

Mr. GLENN. I did not mean to interrupt you, but I was not at the meeting at International Falls, and I wanted to get your line of thought in that connection.

Mr. SAMUELSON. These men—that is, the settlers—have shown the engineers what they believed was the high-water mark. The acreage which was presented to this commission by the engineer who was employed by the settlers, I believe I can safely say does not vary but possibly a very few acres from the amount that has been given by your consulting engineers. The power company did not ask this commission whether or not they had a right to raise this water. They did not ask for permission to raise these waters either of the United States Government, the Canadian Government, or the International Joint Commission, the body duly appointed to take care of all questions of that kind. At the time of entering into this treaty the United States Government and the Canadian Government, if you please, transferred their sovereign power of control of these waters over to this commission, and it is up to this commission to investigate and adjust the height of those waters. These people raised that water more than 6 feet and cast it upon the lands of these settlers whom I represent. The settlers had no redress, except to go into the courts of the State of which they are residents.

In the month of December, 1913, the settlers held a meeting in the northern woods and asked me to come in and consult with them. They asked my advice as to what they could do. I advised them to go to these people who had cast this enormous body of water upon their lands and taken from them their homes; when that matter was taken up with that company it did not feel, as their counsel now feels and states the facts to you, that you should be liberal with these settlers. That was not the answer that we received at that time. The answer we received a that time was this: We have a right, we have a privilege granted to us by the Government to raise this water up to high water mark, and high water mark is the highest point to which the waters have ever gone. Not only that, but they said "We are under a binding obligation to the Dominion of Canada to construct a dam at that place (International Falls) and to raise the waters to the 500 bench mark." They said, "You can not hold us liable, we have this right, and we are going to see that we do not get into any difficulty with the Canadian Government." That is the answer that they presented. That did not provide food and clothing for the poor children of these homesteaders up there in the woods. Their fields had been flooded. They were driven from their homes. They were poor men, naturally, and there was only one thing for them to do, and that was to commence a proceeding in the State courts. That proceeding was started in the State courts, and when it was commenced this company raised all the technical objections that are known to the ingenuity of the best lawyers whom they could employ, including my friend Mr. Rockwood, here. They raised Federal questions in their answer so that the matter might be taken to

the Supreme Court of the United States, and for the benefit of the Canadian members of this commission I will say this: That carrying a case to the Supreme Court of the United States often involves a waiting period of six or seven years. In the meantime, the settlers suffer and the power company have the use of their lands.

I told these settlers that they did have the right to go into court and ask the court to enjoin the maintaining of the water to that point. But I felt that that would be an injustice, that even though an injustice was being done to them that they should not do an injustice. There is one action pending in the Federal court, I believe, where they have asked the court to enjoin the keeping of the water up to the point where it now is.

In order to have the legal questions determined as to whether or not they had the right to maintain the water to the point where they claimed they had the right to keep it, we went into court. You will recall the gentleman who appeared before you during the hearings, Algot Erickson. He was a man who had gone up into the northern woods in the year 1898. He had carved out a home for himself there. He had prepared a farm and had something like 117 acres cleared and under cultivation. Then this company came along and cast this water upon his land and drove him from his home, leaving his little house up on top of a little island and overflowed, according to his figures, 116 acres of the land that he had worked hard to prepare for cultivation.

We tried that case in court for a period of two weeks. The testimony contained 644 printed pages. All the technical objections that are known to the law are contained in that book of testimony, and the only question that was before the court was whether or not this man who had had 160 acres and from whom they had taken 116 acres by casting water upon his land, was entitled to be compensated by this company. They cited the Canadian law to show that the Canadian Government had given them a right to raise the water to what was known as the 500 bench mark. They claimed that by virtue of the authority that had been given by the acts of Congress they had the right to maintain this water at 497 on the American side. They stood upon that, and after two weeks' trial, and after the question had been thrashed out by counsel—I think it took the company's counsel a day and a half to argue the reasons why this case should not be sent to the jury, because if it went to the jury they felt possibly that someone would have to pay for the land that had actually been taken from this poor devil—the court very learnedly stated that the questions involved were of such character that he did not feel justified in submitting that case to the jury; that the questions involved were such as had not been passed upon by the highest judicial tribunal of the State. Not only that, but as a final closing and an added reason for taking the case from the jury, he stated that he knew that a large number of cases had been commenced and were then pending against this poor corporation that has a capitalization of ten million dollars, and that it would be a great hardship to the defendant in that case for these questions to have to be gone into and thrashed out in court. So he left the question of taking this case to the Supreme Court to this poor fellow who had been ousted from his house and home and had no means of obtaining a livelihood after being driven off his farm. The matter

is now pending in the Supreme Court of the State of Minnesota, and I presume that in the course of time it will be taken care of.

Mr. TAWNEY. When will that case be argued—at the April term?

Mr. SAMUELSON. Yes; but as usual the dilatory tactics that have been ever present since this case was first started are present again; I served my brief in time so that the matter might have been argued at the very start, but brother Harris Richardson was engaged in other litigation and, of course, could not get his brief ready. So we shall have to wait until he is on hand again.

But the point of my remarks, gentlemen, is this: Article 8 of the treaty reads as follows:

> This International Joint Commission shall have jurisdiction over and shall pass upon all cases involving the use of obstruction or diversion of the waters with respect to which under articles 3 and 4 of this treaty the approval of this commission is required, and in passing upon such cases the commission shall be governed by the following rules or principles which are adopted by the high contracting parties for this purpose.

It is our contention that this matter is before you to be settled and adjusted. When they shut those gates in that dam they raised the water without authority, and up to the present time I have not heard that this body has ever approved of these people closing those gates and casting that water upon these poor settlers up there.

In next to the last paragraph of article 8 it is provided that—

> In cases involving the elevation of the natural level of waters on either side of the line as a result of the construction or maintenance on the other side of remedial or protective works or dams or other obstructions in boundary waters or in waters flowing therefrom or in waters below the boundary in rivers flowing across the boundary, the commission shall require, as a condition of its approval thereof, that suitable and adequate provision, approved by it, be made for the protection and indemnity of all interests on the other side of the line which may be injured thereby.

I do not know what this commission will find with reference to the uses and purposes to which these waters may best be put. From the statements that have been made before you here it would appear to me that the greatest good to the greatest number ought to be the thing that should control, and I know that will be the thing that will be taken into consideration by this commission. But it has been suggested here that the order in which they should be given preference by the commission should be domestic and sanitary purposes, navigation purposes, and, lastly, power and irrigation purposes. But of course the use of the word "power" is included in the term "domestic purposes."

If the commission finds that the conditions are such that the waters should be brought up to and maintained at a certain level, then and in that case, it seems to me that some provision should be made that would not contravene the constitutional provisions of the United States or of the State of Minnesota; that the credit of the United States should be pledged in some way so that these people who have been or will be damaged by reason of the raising of these waters to a certain level may come before this tribunal and say, "Here is my damage, and here is the amount that I feel I am justly entitled to," and that you then have designated some person or tribunal who can examine into the matter and see whether or not that damage has been done, and, if it has been done, that the men receive their pay.

Mr. GLENN. As I understand you, Mr. Samuelson, if we fix that high-water mark at 491 or 492, or whatever we decide it should be, and after which we discover that on account of the maintenance of this dam for some purpose that your lands are flooded above that, your contention is that we ought to give you damages from that point at which we hold they have a right to go to where they have gone?

Mr. SAMUELSON. That is correct. You see, at the time these people took these lands there were no works of any kind there. The water was then in its natural condition, and it was not until the year 1912, in the month of May, that these settlers were at all affected by the raising of these waters. It was in the month of May, 1912, when they closed their flood gates and brought the water up to the 497 level. The mere fact that your commission found that water there when you went up there should in no way stop you, because that water was not at that point at the time that this commission came into being and was brought to that point after this commission came into being; as a matter of fact, my contention is that the waters of Rainy River and Rainy Lake could not be raised without your consent and approval. Whether that is contained in this order of reference or not, it is a matter of which you must take cognizance. It is a matter that has been brought to your attention during the investigation of these matters, and you must take that into consideration. It is up to this commission to fix and approve of whatever level that lake is to be maintained at.

Mr. TAWNEY. The logic of your position would be that this dam is illegal because it exists and is operated without approval of this commission?

Mr. SAMUELSON. Yes, your honor. It is my contention that this dam is being maintained at a level in absolute contravention of the treaty provisions.

Mr. GARDNER. When was the construction of the dam begun?

Mr. SAMUELSON. The construction of that dam, I think, was commenced along about 1900.

Mr. ROCKWOOD. The principal work was begun in 1905. There had been a little work done before that, but that was when the contractors went in and began work on a large scale.

Mr. SAMUELSON. It is the contention of the settlers, of course, that the dam was not closed so as to affect the rights of these settlers until in the month of May, 1912; that is, we claim that the dam was really closed so as to control the waters in the month of May, and that the waters did not rise until the month of June, and that that time the water was cast upon these settlers' lands and has been maintained there since.

Mr. POWELL. Whatever time the dam may have been closed, it is certain that there was a rise of the level after this commission was constituted.

Mr. SAMUELSON. Absolutely.

Mr. POWELL. With respect to that rise of level we have no jurisdiction, notwithstanding what had taken place before.

Mr. SAMUELSON. The waters were not raised to their present level until after the time that this commission came into being; and it is my contention that the waters are held there absolutely in contravention of the treaty provisions.

Mr. TAWNEY. Have you taken into consideration the exceptions mentioned in the treaty where the approval of the commission is not necessary?

Mr. SAMUELSON. Yes, your honor; I have. It is my interpretation of this treaty that this does not come within any of those exceptions.

Mr. POWELL. Was there concurrent legislation?

Mr. TAWNEY. I am referring to article 13 of the treaty.

Mr. SAMUELSON. It was not concurrent legislation; it was individual legislation. The promoters of the project went first to one and then to the other Governments, and the last act by which the time was extended was vetoed by the President; and it was only after a strenuous time—well, Commissioner Tawney can tell you more about that than I can.

Mr. GLENN. The construction of that dam was started in 1905 and completed in 1909. There was then nothing left to be done except to turn on the water.

Mr. SAMUELSON. It was not completed in 1909.

Mr. GLENN. That is what I understood Mr. Rockwood to say.

Mr. SAMUELSON. It is our contention that it was not completed in 1909.

Mr. GLENN. If it was started in 1905 and completed in 1909, and nothing remained to be done except the turning on of the water, would that be a case where they would have to come to us for any action regarding the matter before they could turn on the water?

Mr. SAMUELSON. I should say so, absolutely and unequivocally, because that is one of the very conditions and one of the very provisions that is provided for in article 8 of the treaty.

Mr. POWELL. But the commission has held already, in respect to the dam at Kettle Falls, that if the powers on both sides of the boundary line have authorized it that is concurrent legislation within the meaning of the act, and we have nothing to say about it.

Mr. SAMUELSON. I do not take the meaning of the treaty to be in accord with that.

Mr. POWELL. Well, there were two of us that thought the same way—Mr. Magrath and myself—but the majority thought that that was concurrent legislation within the meaning of the treaty.

Mr. MIGNAULT. What do you say, Mr. Samuelson, as to the contention, as I understood it, of your opponents that this was something heretofore permitted in the language of the treaty?

Mr. SAMUELSON. It had not been heretofore permitted. It is true that there was legislation there by which they could construct the dam to high-water mark, but that work had not been completed; it had not been permitted. That is, if I say that a thing has been permitted, it is not the mere permit but the actual use that must be taken into consideration.

Mr. MIGNAULT. I would assume, subject to hearing what you have to say, that what was intended by this clause was to protect vested rights.

Mr. SAMUELSON. That is correct.

Mr. MIGNAULT. Now, rights would be vested by permission given prior to the treaty, and it was not the intention to withdraw this permission when this treaty was passed.

Mr. SAMUELSON. That may be true in regard to vested rights, but I desire to call the commission's particular attention to the pro-

visions contained in the acts passed by the Congress of the United States and by which this dam was constructed. In every one of the five acts the United States Government undoubtedly felt that they were sailing pretty close to the line, and you find this in section 3, "That the right to alter, amend, or repeal this act is hereby expressly reserved."

Mr. MIGNAULT. Is that a usual clause in your statutes?

Mr. SAMUELSON. Yes.

Mr. MIGNAULT. It is not in ours, because it goes without saying.

Mr. SAMUELSON. This clause being in there, and after that particular act was passed, the United States Government comes in and they enter into this treaty. Under the treaty they place in this commission the duty of authorizing every act of raising or in any way changing the boundary waters. I do not care whether the question is specifically referred to this honorable body or not, under the present reference, as, in my opinion, under the treaty, it is up to this body to take a first hand in it and themselves look into the question.

Mr. MIGNAULT. The application for the construction of the Kettle Falls Dam was made to this commission under articles 3 and 4 of the treaty. That was not done in the case of the International Falls Dam.

Mr. SAMUELSON. In regard to the Kettle Falls Dam, I wish to say that it is my understanding that there is no congressional act upon which they acted. They acted without any other authority except such authority as an individual might have to put in a structure wherever he——

Mr. TAWNEY (interposing). You are not correct in that, are you, Mr. Samuelson?

Mr. SAMUELSON. There was no congressional act with reference to the Kettle Falls Dam.

Mr. TAWNEY. Congress enacted a law authorizing the construction and maintenance of the dam on our side of the line at Kettle Falls.

Mr. MIGNAULT. It was found by the commission that there was reciprocal legislation and that that took it out of the provisions of article 3 of the treaty.

Mr. SAMUELSON. I was under the impression that there was no legislation with reference to the Kettle Falls Dam.

Mr. TAWNEY. Yes; there was. You are mistaken about that.

Mr. MIGNAULT. That was expressly found by the commission. I was not on the commission at that time, but it expressly found that there had been reciprocal legislation. It was contended by two of the commissioners that these two statutes did not constitute reciprocal legislation, but the majority found otherwise.

Mr. SAMUELSON. I contend that under article 8 of the treaty that wherever the use or obstruction or diversion of the waters with respect to which under articles 3 and 4 of this treaty the approval of this commission is required that that has to do with the dam at International Falls, and if they raise the waters there they do so in contravention of the treaty.

Mr. MIGNAULT. I think you need not trouble yourself about a special agreement, because article 3 of the treaty apparently refers to a special agreement. It says, "Heretofore permitted or hereafter provided for by special agreement." As to the question of permis-

sion heretofore given, it refers to a permission which antedated the treaty.

Mr. SAMUELSON. No permission had been granted except the permission to raise the water to high-water mark. We claim that they have gone beyond high-water mark, and to an extent of 6 feet above high-water mark, and that they are doing that without the consent of this commission.

I represent some 45 or 46 of these settlers that have been affected by the condition of the waters of Rainy Lake as it is now being maintained. Some of those settlers, in fact practically all of them, have commenced actions in the district court of the State in which they reside, but the inefficacy of the law is such that I do not believe they will be able to obtain the justice to which they are entitled. If you find it necessary to raise the waters of Rainy Lake in order that the waters of the Lake of the Woods may be kept and maintained at some level to be fixed by the commission, I then feel that this commission should recommend a level on Rainy Lake possibly up to 501 or such a matter. It may be that the water could be maintained at 500. But I think that some little latitude should be given, so that a freshet or something of that kind might not cause it to go beyond that, and the commission should allow such sum to the settlers as would compensate them for the land that is actually taken.

Mr. MAGRATH. Assuming that the commission did something of that kind, what would happen to those cases in the courts?

Mr. SAMUELSON. If the commission adjusted those matters, those cases in the courts, of course, would fall by the wayside. At the present time the actions that have been brought by the settlers are for the damage that they have sustained by reason of what we call trespass for a period of two years, and it is the loss of the profits that they would have suffered and the loss that they will sustain by reason of the presence of this water that they now seek to recover for.

Mr. MIGNAULT. What is the gross amount claimed?

Mr. SAMUELSON. The gross amount claimed up to the 497 level, in round figures, is about $100,000.

Mr. MIGNAULT. That is outside of the suit instituted by the State of Minnesota.

Mr. SAMUELSON. That is outside of the suit instituted by the State of Minnesota. That is up to the 497 level. At International Falls I filed with the commission a paper that is known as Settlers' Exhibit A, which gives a description of the land of each one of the settlers and the amount of land overflowed at the 497 level. I have also added to that the amount of land that would be overflowed up to the 499 level and the 500 level. The figures that were presented to the commission at International Falls, I think, would bring the damage at the 497 level up to about $100,000 in round figures. If you raise the water above that level, it would possibly add 15 per cent to the total amount for every additional foot that the commission saw fit to raise it.

Mr. TAWNEY. Which do you think these individual riparian owners would prefer, to have the commission recommend the ordinary high water as the level at which it should be maintained, which would entitle them to no compensation whatever, or the highest possible level, which would entitle them to compensation on the basis of their valuation?

Mr. SAMUELSON. As to that I can only say this: These people came to the northern portion of Minnesota because they liked that country. They are interested in everything that is done by this commission or anyone else that is for the development and betterment of that northern country in order that the best results might be acquired from this enormous water power that they have there, and they would say "amen" to any level that was fixed by this commission, even up to 501 or 502, if such a level was practical, the only thing being that this commission ought to make some fixed mark beyond which they could not go, and that compensation should attach to whatever level is fixed up to such particular level.

Mr. TAWNEY. They would prefer that rather than to have the commission recommend a level that would not entitle them to any compensation at all?

Mr. SAMUELSON. The situation would be simply this: It is our present contention that the water was raised in the month of May, 1912. By the 1st day of June the water, as I now recall, obtained a level of 496, or, for practical purposes, 497. The water was maintained there during that entire summer and they were deprived of the use of their farms during the year 1912. Beginning with the month of January the water receded until it got down to about 493 in the latter part of March, at which time the waters commenced to rise again and they were gradually brought right up to the 497 level, where it was maintained during the summer. It has been maintained each subsequent year up to that level during the summer months—that is, during the agricultural seasons. Now, if this commission should say that the power company that is maintaining this condition should bring this water down to the ordinary normal level—as we claim, at 491—then these settlers have been deprived of the use of their lands for a period from the summer of 1912 down to the time that this water was let down, and the only way in which they could get recompense for that would be by an action in court. Such an action would be almost prohibitive, so that they would be deprived of their just dues.

I think that taking everything into consideration—including the amount of water power that may be developed there—these settlers would be better off themselves and that they would really ask that this commission fix the level possibly where it is now or even make it higher than it is now in order to get the best results out of the water they have there, the only condition being that they should be justly and fairly compensated for the land that is actually taken from them.

Mr. MAGRATH. You spoke of the ordinary normal level being 491. I was under the impression that you were calling 491 the high-water level and also the meander line as laid down by the surveyor when he subdivided that land. Am I correct in that understanding?

Mr. SAMUELSON. That is correct. We contend that the meander line is practically at what is known as the high-water line or the high-water mark.

Mr. MONDELL. Mr. Samuelson, I am very strongly of the impression that the high-water mark found by the engineers was higher than that. I think if you will look at plate MM in the report of the consulting engineers, you will see that the water mark shown on the rocks is much higher than that. The plate I refer to appears

just before page 165 in the engineers' report. There is another plate referring to Rainy Lake, plate LL. The heights are given there and are away above what you have stated.

Mr. POWELL. Those are the marks on the rocks. The line of vegetation might be considerably below that.

Mr. SAMUELSON. In answer to that, Commissioner Mignault, I will say this: The high-water mark is not the mark created by the highest point to which the water has gone at any time. In referring to the testimony of Algot Erickson, one of the first witnesses that appeared before you, in the month of January of this year, at International Falls——

Mr. MIGNAULT (interposing). He was not an engineer, was he?

Mr. SAMUELSON. No; he was one of the settlers, but he told you at that time, and so did Mr. Ralph, the engineer that was produced by the company, that they found marks upon the trees that were some considerable distance above 497. There has been unusually high water up in that country at times; there have been regular cloudbursts there at times; so that the water has risen up and practically overflowed all that country. But when you find the marks on growing trees, that are 6 and 8 inches in diameter, of course, that of itself shows that that is not the high-water mark as it is generally understood and defined by the courts of our country.

Mr. MAGRATH. But the courts of your country do not define a high-water mark as a meander line.

Mr. SAMUELSON. The courts of our country, both the United States Supreme Court and the State courts, define high-water mark as being that line of demarkation where the water stands for such a period during the year as to destroy vegetation. The fact that waters may overflow onto uplands does not indicate a high-water mark, but the high-water mark is that point at which the water stands continuously for such a length of time during the year as to destroy vegetation.

Mr. POWELL. You had better say as to change the character of the vegetation.

Mr. SAMUELSON. The courts have not said that.

Mr. POWELL. That is what the courts should have said, because fresh or salt water covering ground will admit of vegetation, but the character of vegetation is changed. It may be water grass.

Mr. SAMUELSON. That, however, is not the line of demarkation that has been laid down by the Supreme Court of the United States and the Supreme Court of the State of Minnesota.

Mr. MIGNAULT. That might apply, however, to the lichens that are shown on these rocks. The engineers have gone into that and they considered that as one of the indications of where the stage of water had been.

Mr. SAMUELSON. In response to that, Mr. Mignault, I will say that the engineer who made the surveys on behalf of the settlers was right upon the land itself. The settlers who had lived on this land for a period of time knew where the water usually came to, and they pointed out the place to the engineer where the water ordinarily came to and where it stood for the greater portion of the year. In arriving at the acreage that was overflowed by this water, the engineer took the distances that had been shown to him by the settlers and the extreme point where the water was at the time of making that survey.

Mr. MAGRATH. Does he claim that that line coincided with the meander line?

Mr. SAMUELSON. He stated that that practically concided with the meander line. In other words, he located something like 17 meander posts and took the field notes and found that the meander posts varied from 489 to 493.

Mr. MAGRATH. In what year was that?

Mr. SAMUELSON. That was in the year 1912.

Mr. MIGNAULT. When this ground was covered by water.

Mr. SAMUELSON. It was covered by water at that time, and, in order to ascertain where the meander posts were, he followed out the metes and bounds, and when he got to the point he would go down into the water and hunt for it, and did actually locate the posts under water. At that time he found that the meander corner was covered with from 5 to 7 feet of water.

Mr. MAGRATH. Could the settlers show him the evidences of high water on the grounds then?

Mr. SAMUELSON. There were evidences in some instances of where the water had been at some time or other even higher than that particular mark; that is, isolated instances where there had been an enormous flow of water that came through and left the mark upon the trees, away above the high-water mark, of course.

Mr. GLENN. In regard to that, did not the engineers almost in substance say that the high-water mark had been so obliterated by the drifting conditions that they could not ascertain it exactly, but that from computations they had made they estimated the high-water mark prior to the building of this dam at 495? Was not that in substance what Mr. Meyer stated to the commission?

Mr. SAMUELSON. I do not know what Mr. Meyer said. Mr. Meyer, of course, was not in the same position to ascertain what high-water mark was that the engineer of the settlers was, because these settlers knew where the high-water mark actually had been. Mr. Meyer, of course, did not have the same facilities for ascertaining that condition that our own engineer had.

Mr. MIGNAULT. You will realize, Mr. Samuelson, how important it is for us to know exactly where the high-water mark was, because that is the starting point of any compensation.

Mr. SAMUELSON. That is true. I recognize that, and I have tried to give to this commission the very best information that we have; and the engineer who prepared Settlers' Exhibit A, which is before you, has actually been upon each one of these pieces of land. He has had it pointed out to him not only by the owner of the land himself, but by others who knew where this water came to. He has taken that together with the Government field notes showing the metes and bounds where the meander corners had been placed, and the meander corners and meander posts coincided practically with what is known as high-water mark. As near as we can get at it—that is, assuming that high-water mark on this particular land—it is somewhere from 489 to 493. Yet, at the same time, irrespective of what the actual high-water mark may have been, in these particular cases the engineer who made that compensation went upon the land and ascertained from the settlers themselves where the water had stood for such length of time as to have a direct influence upon the soil. He made

the computation and measurements of each individual tract of land in that way, and I think that there is practically no difference between the settlers' engineer and the consulting engineers of the commission as to the amount of acreage that there is in the particular land that has been overflowed.

Mr. MIGNAULT. Mr. Meyer agreed with the figures of Mr. Berg as to the areas; but the material point for us is the starting point. Where was high water on Rainy Lake? I remember exactly the evidence to which you refer and the testimony of Mr. Berg, but what is troubling me is that our consulting engineers apparently are of the opinion that Rainy Lake was at a higher level than what you have mentioned in a state of nature.

Mr. SAMUELSON. I have got to differ with your engineers if they claim that the natural state of the water in Rainy Lake was more than 493. You can not go any higher than 493. I have been on Rainy Lake myself before the waters were raised on that lake by any obstructions that were in them. I know the lake and I know the conditions that obtain there and that existed there. I have even been upon the land of these settlers prior to the time when the water was raised by the dam, and I know just exactly where the water came to when it was at this high point. I went over these matters with our engineer, and if the consulting engineers fixed the level of Rainy Lake at a higher point than 493 I must respectfully disagree with their conclusion. I do not mean to say that the water of Rainy Lake has not been a good deal higher at times than it is now. It has been for short periods of time.

Mr. MIGNAULT. At what you would term flood stages?

Mr. SAMUELSON. At flood stages of the lake it has been considerably higher. There is no question about that. But the marks that would leave would have a good deal to do with the way in which the run-off came at the time. It may have stood still. There may have been some obstruction at the opening at Pithers Point, where the water run into Rainy River, so that they could not get out, and the waters at flood stages may have stood and made their mark upon the rocks; but the ordinary general high-water mark, as commonly understood and accepted, as I have been able to get it from people who have lived on that lake for 30 years and more, has been from 489 to not to exceed 493. I have gotten that from the men who have lived on that lake for a sufficient length of time, so that I think their word would be absolutely final. I would take it in preference to the word of some one who went there to ascertain what the level was.

In that connection, Mr. Mignault, I would like to call your attention to the testimony of L. A. Ogard, who appeared before this commission. He was the man who made the original Government survey of some of this very land that is included in the question before you. He fixes the natural level of that lake at what would be considered possibly 491, and he has been up in that country, I think, for 25 or 30 years.

Mr. ROCKWOOD. He is one of the plaintiffs claiming damages?

Mr. SAMUELSON. He is one of the plaintiffs claiming damages. He is in the same category as the rest of them. If that has to be taken into consideration in viewing his testimony, he is in that class.

Mr. TAWNEY. The act of Congress authorizing the Kettle Falls Dam was approved February 24, 1911.

Mr. SAMUELSON. I should say that even then the act of Congress would not be at all conclusive; that even then, in order to raise that water, under this solemn treaty, the approval of this commission would have to be obtained.

Mr. TAWNEY. For the construction of the Kettle Falls Dam?

Mr. SAMUELSON. Yes, sir.

Mr. TAWNEY. Well, the commission has decided that otherwise. The commission decided that they did not have jurisdiction under the treaty.

Mr. SAMUELSON. I really believe that the treaty is so broad and the powers of this commission are so great that there is practically nothing which has to do with international waters over which the commission would not have jurisdiction.

Mr. MAGRATH. You said a few moments ago, Mr. Samuelson, that your estimate of the damage would be about $100,000. How many acres of land does that involve?

Mr. SAMUELSON. It involves 1,322 acres at the 498 level. There is included in that some dock property and some houses and lots at Ranier, the owners of which I also represent. I would say that for every foot that it was raised above the 498 level a conservative estimate would be for the commission to add about 15 per cent to that.

Mr. MIGNAULT. It would be more than that if it destroyed industrial property. There is a company at Fort Frances, for instance.

Mr. SAMUELSON. This would not destroy any industrial property. This is merely on the American side.

There is another matter that I desire to call to the attention of the commission. I do not represent them, but it is my understanding that the Duluth, Missabi & Northern Railway Co. owns certain lands up there, and I should say, conservatively speaking, that there would be involved about $25,000 worth of damage.

Mr. MIGNAULT. On Rainy Lake?

Mr. SAMUELSON. On the tributaries to Rainy Lake. I should say that if the waters were raised on Rainy Lake to say the 500 level, leaving the claim of the State of Minnesota out—that is, as being in a class by itself—that the damage to the settlers and to the other landed interests there could be taken care of for, in round numbers, say $150,000. That is not including anything, of course, on the Canadian side. We know that there are some interests there that are seriously involved in case the water should be raised to the 500 level, but on the American side the claim of the State has just been given, as I recall, as $110,000 or $111,000. I think that the private interests could all be taken care of at the 500 level at say $150,000.

If there are any questions that any member of the commission would like to ask me, I would be pleased to answer them.

Mr. POWELL. Mr. Samuelson, you have made a study of this matter. Does not the character of vegetation change very rapidly with the change of conditions; that is, the natural vegetation or what we might call the native or indigenous vegetation as against foreign or exotic vegetation? The native plants seed themselves very quickly if the conditions are suitable.

Mr. SAMUELSON. They do.

Mr. POWELL. To show you how rapidly the vegetation changes with conditions, we were called to look at a field that two years previously had had grain on it, and nearly from one end to the other it was covered with cat-tails. The whole vegetation had changed in two years, and not only changed, but it was changed to such mature vegetation that it had blossomed and bore cat-tails such as you would get in any district where they were perpetually located.

Mr. SAMUELSON. That is true. Take some of this land of these settlers whom I represent. They raised a good quality of wild hay upon that land prior to 1912. In the latter portion of 1914 an engineer by the name of Ralph, who has appeared before this commission and who is now in the employ of the company that my friend Rockwood here represents, brought in certain grasses that had been taken from the fields that had been flooded below the 497 level. Those grasses were of an entirely different character from the grasses above the 497 level, due to the fact that the field had been overflowed for a period of two years. The idea that they had in mind by bringing those grasses in was to show that this land under no consideration was of any particular value.

Mr. POWELL. They may have drawn too large an inference. Let us follow this out. If the natural vegetation can be changed in a period of two years by the action of water creeping up on it, and there is another style of vegetation, water grass or something that takes the place of the old vegetation, would not the return of the water have the effect also of changing the vegetation and restoring the vegetation that had been there previously?

Mr. SAMUELSON. That is possible.

Mr. POWELL. Now, take this high mark that we are speaking of, 498. That mark shows that the character of the lichen vegetation had changed on those rocks. Is it not fair to assume that the change of vegetation there was general, that we had a cycle of low water, and that nature had created another style of vegetation down to what is now regarded as the high-water mark?

Mr. SAMUELSON. Answering that question, Mr. Powell, I will give you a concrete illustration. On the farm of Algot Erickson I examined the conditions at the level of 497. At that level I found an oak tree growing that was then standing in water. Taking its size into consideration and a knowledge of the tree itself, I would say that it was at least 100 years old. Now, that tree could not possibly have grown in water, because oak will not grow in water.

Mr. POWELL. That might be very true. There might have been a rim along the margin of the lake thrown up by ice or tidal action which prevented the lake water from encroaching and there was a lagoon, but your big oak would grow very rapidly, and that rim might have afterwards been broken by a higher rise of tide which allowed the water to flow in and kill the vegetation there. I would not place very much reliance on an incident of that kind.

Mr. SAMUELSON. I just call that to your attention. I have been over most of this land, the owners of which I represent. I have been on land myself in order to study the conditions there, and I found that that is generally true all along there. There are marshes there where hay has been cut for as much as 25 or 30 years, and the men that have cut that hay for that period of time are still in that locality and know just exactly where the water was.

There is one other thing that possibly I should call the attention of the commission to, and that is with reference to the land values there. These settlers are men who have gone in there and picked the choice pieces of land. They had the first choice of that land that is in that particular neighborhood. You will remember that Mr. Skoglund testified on cross-examination that he was a market gardener and that that particular soil up there was the best that he had been able to find anywhere for market gardening and for vegetables of all kinds. So that the values that have been placed upon these lands by the settlers, I think, are not too high, especially when you take into consideration what some of this land that has been cleared cost these settlers in labor and actual cash. It costs as much as $65 or $70 an acre to clear and prepare an acre of this land for cultivation; that is, certain classes of it, and especially when it is timberland.

Mr. MAGRATH. How far is their market from them?

Mr. SAMUELSON. The land that is involved here now before your commission is all the way from 3 to, I think, 12 miles from International Falls. I think in one instance it is 15 miles from International Falls.

Mr. POWELL. There is land enough there to grow celery for the whole continent.

Mr. SAMUELSON. That is true; but man liveth not on celery alone. I do not want to be understood by this commission as claiming that this great work should not be carried forward. I am a resident and a citizen of Minnesota; the settlers are residents and citizens of Minnesota; and anything that tends to develop Minnesota or tends to develop the country on the opposite side is for the mutual benefit of all concerned. Anything that will aid in developing power, in my opinion, is the thing that should be taken into consideration, not only for the present, but there is a future prosperity that will follow up. Your children and my children will receive the benefits of the work being done by this commission.

I do not want it understood that I try to cast anything in the way of the development of any of the work that has been started. The only thing that I ask is that this commission see to it that these poor settlers whom I represent receive that to which they are justly entitled, and that some provision be made whereby they do not have to spend their entire substance for the purpose of getting that which is their due. I hope that the commission will bear that in mind. I wish to thank you for the kind consideration that you have given me.

STATEMENT OF MR. J. A. O. PREUS.

Mr. PREUS. May I be permitted to make a brief statement? I had not expected to say anything here, but I think there is one point at least that should be emphasized from the standpoint of the State. Mr. Samuelson's last statement prompts me to rise.

The State of Minnesota does not want to assume the position of being hostile to the development of water power on Rainy Lake and the Lake of the Woods, nor does it want to be hostile to the agricultural interests there. The State realizes full well that both of these great interests can go forward to the benefit of mankind in that community. But I know a little of the history of this controversy. I was employed by Senator Nelson as one of his clerks when the Min-

nesota & Ontario Power Co. got the last extension of time for building the dam at International Falls that has been referred to here. I remember how that bill was passed and then President Roosevelt vetoed it. He permitted the bill to be passed over his veto by reason of the fact, as he stated, that he was misinformed as to the fact that the company had expended some money—in fact, a considerable amount; I believe about half a million—in the construction of that dam. The power company has been granted something from the Government. In return the State has suffered an injury from what the Government has given to this power company, and, as Mr. Mignault quoted a maxim from the Roman law to Mr. Berkman to take some inspiration from, I would suggest that another be quoted to the Minnesota & Ontario Power Co., and that is this: Sic utere tuo ut alienum non laedas. That simply means that any man shall use his own property in such way as not to injure some one else.

The Government gave these people the right to build that dam by legislation, and in defiance of that, as has been argued here, they have raised the watermark to such an extent as to injure a part of our domain and to injure our settlers in that community. The State is interested in the development of this section of Minnesota. Minnesota is a new State, not in history, but it is so far as development is concerned. Less than one-half of our entire acreage is under plow, and that is the place in the State of Minnesota where we look for the earliest development. While it is true that these companies have made it possible for the settlers to come up in that community, nevertheless, after they have gotten there it should not be made impossible for them to live there.

I am particularly anxious that a speedy settlement should be made of these matters in the interest of the settlers and of the State. The State's reason therefor is a dual one—first, that we want our claim settled, and second, these lands have all been appraised because your commission desired information as to their value. They have been appraised at considerable expense to the State. That appraisal falls of its own weight when there is timber on the land, so far as placing the land on the market after a period of two years is concerned, and, unless this matter is settled within a period of two years, it will be necessary to reappraise these lands. The legislature will meet two years from now, and if a right of flowage should be given this company over some of these lands we would need legislation in the State to prepare us for that proposition.

Mr. MAGRATH. Did you appraise these lands at the instance of the commission, or had you contemplated appraising them anyway?

Mr. PREUS. No; I had not contemplated appraising them.

Mr. MAGRATH. I understood at International Falls that you were proposing to do that work anyway. If I am wrong in that, Mr. Hilton can correct me.

Mr. HILTON. The record did not so show. Mr. Preus, when he was asked about furnishing the information in pursuance of your request, stated that he would have them appraised by State appraisers in the usual manner provided by law.

Mr. GARDNER. Is there anyone else to be heard now?

Mr. MURRAY. I would like to be heard on behalf of Fort Frances, and promise not to take up very much of your time.

ARGUMENT OF MR. A. G. MURRAY.

Mr. MURRAY. Representing the town of Fort Frances, I am instructed to take the position that we object to any rise in the water level beyond bench mark 497. We do not wish to be taken as consenting to the proposition that 497 is altogether satisfactory. As a matter of fact, we have suffered very serious damage from the maintenance of the level at that mark. But I presume the fact is that we are committed, to some extent, to bench mark 497 by having consented to and possibly permitted legislation and the agreement with the Ontario government whereby the company was authorized to erect its dam so as to store the water to 497. However, we complain very bitterly that the company has not kept its engagement in the way of erecting protective diking along the water front, and if this commission can afford us any relief in that respect we shall be very glad to have its assistance.

The elevation to 500 or any intervening bench mark between 497 and 500 is not, so far as we are concerned, a matter for compensation. The injury, as we see it, would be so great that it could not very well be compensated for. In fact, owing to the rather peculiar situation of the town with reference to Rainy River, which you may see from the map, and the very low site that the town occupies, we are not in the same position as the town of International Falls. We are on the convex side of the river and surrounded practically on three side by the river. The west side is below the dam, so we have plenty of fall there. On the north side, as the commission will see, there are the waters of Rainy River and Rainy Lake. On the south side and on the east side we are also provided with a water front. The situation is such with reference to the muskeg on the north that an elevation of 500 would still flood the muskeg and so undermine the town by reason of its quicksand foundation that it would be impossible to keep the water out of the cellars.

Mr. MIGNAULT. Have we any evidence as to that?

Mr. MURRAY. We have the evidence of Dr. Moore.

Mr. MIGNAULT. I did not remember his reference to the muskeg.

Mr. MURRAY. More than that, the evidence of Dr. Moore showed that from the street lines, of which, say, the center is Crowe Street, about the center of the plot, the flooding of the land by the direct encroachment of the water would be to the extent of from 70 to 450 feet.

Mr. POWELL. From the bank of the river?

Mr. MURRAY. From the bank of the river. In fact, at one place the water would come quite up to Nelson Street. At the present time, as is shown by this map that I produce, and which is in the record as Exhibit P, at the 497 level portions of Front Street along the water front are already flooded, and a very serious encroachment is being made there by the washing out of the banks of the river due to the erosion caused by high water and to the travel of gasoline boats up and down the stream. The cause of that erosion is not due to the fact that the boats produce wave action, but to the fact that nature is creating a new beach there, and the river being filled up practically to the level of the old bank, gradually washes away the banks. There is evidence showing that 8 or 10 feet of this bank fall into the river every year.

Mr. MIGNAULT. Is there any current opposite the town?

Mr. MURRAY. Now, that the dam is built there is practically no current.

Mr. MIGNAULT. Before the dam there was quite a current?

Mr. MURRAY. Before the dam there was quite a current.

Mr. MIGNAULT. And, consequently, that current might have some effect in the way of erosion on the river banks?

Mr. MURRAY. The erosion of the river bank, then, was very inconsiderable because of the lower beach level.

Mr. MIGNAULT. You are chiefly affected now by wave action and seepage, I presume?

Mr. MURRAY. Yes, sir; and also by the action of the water and the frost in undermining the banks. The bank is thoroughly saturated by the high level and in the spring large sections of it fall into the water. That is the situation at present.

Mr. POWELL. There are three lines on this map. One is the original shore line. What is the center line?

Mr. MURRAY. The center line is the limit of the road allowance.

Mr. POWELL. What is the character of the soil along there?

Mr. MURRAY. It is of a very sandy nature. One of the witnesses has testified to the fact that it is of a sort of silt or lake bottom mixed with streaks of clay.

Mr. POWELL. That material melts away with the water?

Mr. MURRAY. It melts away with the water. Here is an extension of the present map showing the Pithers Point erosion, Pithers Point being the town park. It was a part of the Indian reservation.

Mr. MIGNAULT. It is a very much exposed point, naturally.

Mr. MURRAY. That is the point. You will remember that the Duluth, Winnipeg & Pacific Railway crosses there. One great grief of the town people is that a magnificent oak grove on that point is practically destroyed at the present time as a result of the water getting in on the land and destroying the roots of the trees. There are trees there 3 feet through at the butt.

Mr. POWELL. Has the company provided any protective works whatever?

Mr. MURRAY. None whatever. It was a part of the original agreement between the Government and the power company that protective works should be established. We have been endeavoring now for the last six years to obtain construction of these protective works, but for one reason or another we have been put off. The latest excuse is that the Canadian Northern Railway has certain rights along the western portion of the town—along the river front—and that portion stands in the way of any construction on the part of the power company.

Mr. GLENN. How much of that park has been washed away?

Mr. MURRAY. It is indicated there on the map, sir.

Mr. GLENN. Is the number of feet given there?

Mr. MURRAY. Yes, sir; I think so. I think the evidence of Mr. Wright deals with that. Mr. Wright says, speaking of the roadway, that at least 10 feet a year goes out—that is, from the bank—and speaking of Pithers Point, between 600 and 800 feet have gone out. He says further:

> The southerly part of the point marked as marsh is now too wet to be of any use as a park. There is only a small portion near the railroad that is dry enough to be suitable.

Mr. GLENN. What portion of the trees have fallen in?

Mr. MURRAY. Unfortunately, two-thirds of the oak trees are now dead. They can not be restored.

I trust that this commission, whatever it does, will not warrant any increase of level beyond 497 bench mark. I consider the matter so very important to the interests of the town that I am going to take the ground that would not be entertained, perhaps, with any great favor by the commission, and that is, that under its present powers the commission has no power to direct any increase of elevation beyond 497. In that respect I disagree with Mr. Samuelson, who preceded me, that this is one of the matters comprised within article 3 of the treaty and that had already been provided for—that is, that this power company had acquired certain rights that can not now be interfered with by the commission. I quite agree that if it had been within the scope of the reference that this commission might, if it saw fit, direct an elevation of the banks so as to increase the storage capacity of Rainy Lake, but it seems to me that such is not within the purview of the reference.

I will not take up much time of the commission, but in referring to section 1, we have these words:

> In order to secure the most advantageous use of the waters of the Lake of the Woods.

The commission will see that is a sort of an indirect manner on the part of the power company to secure a raise of the levels of Rainy Lake. That evidently was not in contemplation at all.

Mr. POWELL. You think the Lake of the Woods was simply a pretext?

Mr. MURRAY. Yes.

Mr. POWELL. And the real object is the mill at International Falls?

Mr. MURRAY. The real object is the mill at International Falls. Of course, it is some advantage, no doubt, to the power company to have a regulation of the Lake of the Woods, but is it necessary to go so far afield? It is fully 300 miles away. Now, to proceed:

> In order to secure the most advantageous use of the waters of the Lake of the Woods and of the waters flowing into and from that lake on each side of the boundary—

Rainy River does not flow into the Lake of the Woods on either side of the boundary. As a matter of fact, Rainy River constitutes the boundary line. [Continuing reading:]

> for domestic and sanitary purposes, for navigation and transportation purposes, for fishing purposes, and for power and irrigation purposes and also in order to secure the most advantageous use of the shores and harbors of the lake and of the waters flowing into and from the lake.

Mr. TAWNEY. Do not the waters of Rainy Lake and Rainy River flow into the Lake of the Woods?

Mr. MURRAY. The waters of Rainy Lake and Rainy River flow into the Lake of the Woods, undoubtedly, but not from either side of the boundary.

Mr. TAWNEY. From both sides?

Mr. MURRAY. No; they form the boundary.

Mr. POWELL. Read further down.

Mr. ROCKWOOD. It only runs on the boundary line.

Mr. MURRAY (reading):

Is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and if so, at what level?

You are referring there to the Lake of the Woods only. The second section reads:

If a certain stated level is recommended in answer to question 1, and if such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake, when maintained at such level, overflow the lowlands upon its southern border—

Surely that is the southern boundary of the Lake of the Woods.

Mr. POWELL. There is no question about that. Go on.

Mr. MURRAY (continuing reading):

Or elsewhere on its border.

That is the border of the Lake of the Woods, undoubtedly. [Continuing reading:]

And what is the value of the lands which would be submerged?

So that dealing with these two sections we are tied up absolutely to the Lake of the Woods.

Mr. MAGRATH. Are you not putting yourself out of court in reference to Fort Frances?

Mr. MURRAY. I am more concerned, I might state to this commission, with maintaining the level at 497 than being protected from the encroachment at 497, because we possibly can get some recourse from the courts; and, further, if this commission gets extended powers, then perhaps we will obtain the protection that we desire at the 497 bench mark.

The next section is the section, as I conceive, under which the commission thinks at all events it has jurisdiction to entertain questions regarding the level of Rainy Lake. It reads:

In what way or manner, including the construction and operation of dams or other works at the outlets and inlets of the lake—

Surely "of the lake" means Lake of the Woods, the only lake mentioned. [Continuing reading:]

or in the waters which are directly or indirectly tributary to the lake or otherwise.

Mr. MAGRATH. There it is.

Mr. MURRAY. Quite so.

Mr. MAGRATH. "Directly or indirectly."

Mr. MURRAY. Quite so.

Mr. MAGRATH. That covers your Kettle Falls region, the Lake of the Woods, and Rainy Lake.

Mr. MURRAY. Here is the Lake of the Woods, and here is Rainy Lake, two very important bodies of water, Rainly Lake not as large as Lake of the Woods, but still within measureable distance of it; that is, it is possibly of corresponding magnitude to the Lake of the Woods as Lake Huron corresponds to Lake Superior. Could you call Lake Superior tributary to Lake Huron? Perhaps you could in one way, because the waters of Lake Superior undoubtedly flow into Lake Huron. But yet, when you read the whole three sections together, referring to the question of estimating damages of lands on the southerly boundary of the Lake of the Woods, was it not in the

contemplation of the referring power that this inquiry should be directed solely to maintaining the levels, and to the questions relating to the Lake of the Woods only? I submit so, because otherwise surely, considering the importance of the Rainy Lake watershed, it would have been specifically mentioned.

So I submit that on the construction of the three sections only the levels of the Lake of the Woods are to be considered in this reference. Then, when we go a little further, let us see what the conditions were with reference to the levels of Rainy Lake. We had in the year 1895 an act of the Dominion of Canada giving certain powers to this power company, or Mr. Backus and his associates, as is termed in the act. I think the power company was incorporated by charter under the joint-stock companies act of the Province of Ontario about that time.

Then we have first an agreement in 1904, made between Mr. Backus and his associates, and the Ontario government, by which the Ontario government agreed, for the sum of $5,000, to grant to Mr. Backus and his associates, who were afterwards incorporated as the Ontario & Minnesota Power Co., certain water-power rights at Fort Frances, and the right to construct a dam, with certain water privileges, of which Rainey Lake is the watershed.

This dam was constructed in 1909, as I understand. The Kettle Falls Dam was constructed somewhere in 1912, and after that, in 1912, came this reference to this commission. Surely the Government of the United States and the Government of Canada have been conscious of the fact that the levels of Rainy Lake and the power question had already been disposed of; that Rainy River and Rainy Lake, so far as Koochiching Falls was concerned, at all events, were not open questions; that by legislation and by agreement rights had been granted to this power company; and that thereafter it was not thought fit to insert the Rainy Lake watershed in the instructions to this commission.

On the question of the increase in elevation, if the commission will refer to page 498 of volume 2 you will find the report of Mr. Fanning, the consulting engineer of the power company, as I take it, at all events, a report from him to D. W. Lockwood, major, Corps of Engineers. In his report Mr. Fanning states:

> In the plan for the development of the water power of the falls it is proposed to place the crest of the dam at altitude plus 494 and to introduce in the dam a sufficient number of sluices that the space above them would form a part of the overflow weir of the dam.

Evidently at that period 494 was considered a reasonable development of this water power. Later, on joint consultation of the company's engineers and the engineers of the Ontario government and the Dominion authorities, 497 was agreed upon as the maximum. I am prepared to state that when 497 was agreed upon as the maximum it was considered by competent authority at that time that the waters should not, in the public interest and in the interest of the inhabitants, be raised beyond the bench mark 497; that that was the ultimate limit at which the waters might safely be raised, because we can, I think, take it for granted that Mr. Backus was at that time endeavoring to get all out of the water power that he could possibly

get, and that 497 was considered as the ultimate limit by both the Ontario and the Dominion Governments.

If this commission has the discretion to raise the limit to 500 or 501, it would seem to me that work of much magnitude would have to be undertaken; that is, not only would the front of the lake have to be diked to Hay Marsh Bay, but all the surrounding shore to the north of the town beyond this muskeg would likewise have to be diked.

Mr. POWELL. What is the length of that shore?

Mr. MURRAY. It would probably be 10 miles. It is a winding shore, and the work would be a work of such enormous magnitude as to be absolutely prohibitive. This muskeg at the north of the town is at present capable of drainage. The town hopes at some time to add to the resources of the town a large agricultural area that is now waste by the drainage of this marsh. If the 500 bench mark is permitted, that will be practically impossible, because of the seepage and because of the low level of this muskeg.

Mr. TAWNEY. Before you leave that point, you were speaking a moment ago about the shore on your side of Rainy River. Would it not be possible to protect that shore by revetment?

Mr. MURRAY. The trouble about that would be we could not get rid of the seepage. You might protect the shore by revetment and prevent direct access of the water to the shore in that way, but that would not prevent the seepage, whereby cellars within a very large area would become flooded.

Mr. POWELL. Would you have very much trouble with seepage?

Mr. MURRAY. The soil there is a regular sieve.

Mr. MAGRATH. Seepage is what destroyed that park, is it not?

Mr. MURRAY. Yes; seepage practically. In fact, the proposition of increasing the level to 500 has been taken as a joke in Fort Frances. It has been so appalling that nobody there has considered it seriously possible or practicable or that the power company was seriously proposing or considering such a thing. That is the situation with reference to it.

Mr. GLENN. They seem to be very much in earnest.

Mr. MURRAY. We perhaps did not present a great deal of evidence before the commission partly because at the first sitting I was engaged in Toronto in an important investigation, and we were misled somewhat by the title "The level of the Lake of the Woods investigation," and so on; but we are very much in earnest in endeavoring to prevent any increase beyond the 497 bench mark.

Mr. GLENN. They were very much in earnest in wanting up as high as 500.

Mr. ROCKWOOD. Very much, Mr. Chairman. I have only one word to say in regard to that.

Mr. POWELL. Had you not better wait until he is through?

Mr. ROCKWOOD. The question was asked.

Mr. MIGNAULT. I suggest Mr. Rockwood be allowed to answer it now.

Mr. ROCKWOOD. The commissioner indicates that he did not care to address the question to me.

Mr. GLENN. I was addressing the other attorney.

Mr. MURRAY. This question arises; perhaps it is a question for the Ontario government. Under the agreement with the Ontario government by which water-power rights were granted to the com-

pany, a limit of 497 was placed upon the head. There is a limit of 3 feet, generating, as Mr. Rockwood said day before yesterday, some three thousand and odd horsepower, of which Ontario would be entitled to one-half—1,500 horsepower. The title to that is in the Province. If in the Province, is not the town of Fort Frances entitled to the use of it under our hydroelectric scheme? These questions of title come up. I merely mention it. It would seem to me, however, that the title of the power company is absolutely limited to the 497 bench mark. Any increase must belong to the Province, who deal with it under the hydroelectric commission.

The peculiar position of this application is this, that we have the power company owning the power proposition at Fort Frances and also at the other end, Kenora, so that the advantage to be derived from any alteration of the level whereby the head is increased is really for the benefit of a private corporation. It is not of any benefit to the town of Fort Frances that Mr. Backus and his associates may grind out 50 tons more of paper or pulp wood in a day. It might mean the employment of a few more men—40 or 50 at the most—but that is a very small matter.

Mr. MAGRATH. Did not the town consider it of importance when they entered into an agreement with them to develop that side of the river?

Mr. MURRAY. Undoubtedly so. But we have gotten now what we say is the safe limit. Any further would be absolutely disastrous. That is the position we take. We have got now as far as the development should be permitted to go. We ask protection in the way of diking, which is not a tremendously heavy proposition at present, but would be with an increased elevation. We ask that. But with that we say that 497, in the interests of power and of the public, would be quite satisfactory.

Mr. MAGRATH. In other words, you think that any increased power you should get there would not offset the damage that you are going to receive from seepage?

Mr. MURRAY. Not by any means. I am asked to represent the interests of several of the landowners who testified in the proceedings at International Falls in February, and if the commission considers that it has jurisdiction to deal with the matter, either at present levels in respect to present damages or prospective damages, I would ask that their interests could be considered. I go further, and if the commission considers that the levels should be raised, then there should be a reference, so far as Canadian interests are concerned, at all events—that is, the interests of the inhabitants or Fort Frances and the interests of the owners of islands in Rainy Lake and owners of lands fronting on Rainy Lake—to assess damages in respect of the flood.

There are a number of cases in which a considerable amount of damage has accrued already, some of which have been referred to in the testimony taken before you, and a good many of them have not been heard. For example, the flooding of the islands would be just as serious as the flooding of similar islands in the Lake of the Woods. Very many of the islands are used as summer resorts, used both by inhabitants of the United States coming from Minneapolis and St. Paul and other places as well as residents of Ontario.

Mr. MIGNAULT. You were before the commission when it sat at International Falls?

Mr. MURRAY. In January; yes.

Mr. MIGNAULT. You tendered evidence there?

Mr. MURRAY. Yes; for a number of people.

Mr. MIGNAULT. And we heard all the evidence that you tendered.

Mr. MURRAY. All that we tendered, but not all that we might have tendered, because we understood your time was very limited.

Mr. MIGNAULT. Still, we gave you a hearing, and you were invited to tender whatever evidence you might have, and you did tender some.

Mr. MURRAY. Some; yes.

Mr. MIGNAULT. Do you not consider now that the case is closed so far as any further evidence which you might have tendered, but which you did not offer to bring before the commission at that time, is concerned?

Mr. MURRAY. On the question of damages I do not think the case should be considered closed, because there are a great many people who would suffer very serious damage who are not represented at all as yet.

Mr. MIGNAULT. That is their misfortune, perhaps, but it is not our fault. We gave notices that we would hear all the interests that might be affected by any rise in the levels of the lake, and we went out there and did hear some. You tendered some evidence and we heard that. We heard a couple of settlers living some miles from Fort Frances.

Mr. MURRAY. I did not represent the settlers, by the way; it was only town people.

Mr. MIGNAULT. But some settlers were heard, as you know.

Mr. MURRAY. Yes.

Mr. MIGNAULT. We heard all the evidence that was tendered. It seems to me that closes the matter, so far as the commission is concerned.

Mr. MURRAY. The evidence was not tendered so much at that time on the question of damages, but on the principle of raising the levels. If we look at the evidence I think we will find that was just the gist of it, except as to the settlers.

Mr. MIGNAULT. There were two settlers at least who stated that their land had been submerged, and who valued their land.

Mr. MURRAY. But the evidence given there was, of course, directed to the fact that the levels should not be raised, and it was not in reference to an assessment of damages, but to show that very great damages would result. Of course, the commission had not made any finding at the time, and I submit that if the commission does make a finding hereafter under which levels should be raised, there should be some reference, either before the commission or before some other authority, possibly a local authority, to assess damages.

Then the Shevlin-Clarke interests are also very seriously affected. I understand they have a representative here.

Mr. POWELL. Lumber people?

Mr. MURRAY. Lumber people. Their plant is within the limits of the town, and a written brief is put in on their behalf, and I understand their counsel is here also. I claim for the benefit of the town whatever may be said on their behalf, not only in their brief, but by

counsel. I do not wish to occupy the time of the commission any further.

ARGUMENT OF A. W. CLAPP, ESQ., OF ST. PAUL, MINN., REPRESENTING THE SHEVLIN-CLARKE LUMBER CO.

Mr. CLAPP. Mr. Chairman and members of the commission, I represent the Shevlin-Clarke Lumber Co. (Ltd.), which is engaged in the business of manufacturing lumber at Fort Frances, Ontario. It is an Ontario corporation, and has been in its present form manufacturing lumber at Fort Frances since 1911. At pages 509 to 514 of the last-printed abstract of the record will be found a statement which the Shevlin-Clarke Co. filed about March 1 with the commission, which consists almost entirely of a report by a consulting engineer, a civil engineer, who was employed by the company for the special purpose of making such a report as would be of some assistance to the commission in this matter, and give them the information which we believed they desired. The report is by Mr. L. P. Wolff, of St. Paul, an engineer who, I think, is already known to the commission, and certainly to the consulting engineer. I think he has made as comprehensive a report as he could in the limited time and that you will find it is conservative and fair.

I have prepared a brief, chiefly for the purpose of getting that statement and the facts before the commissioners in a form as convenient as practicable.

The report of the engineer is in fine print, and I think you will find I have made as well as I could an abstract of the facts and of the engineer's report, and I believe that with that brief—which I, of course, assume will be read—it will be unnecessary for me to take up very much time in discussing the details of the engineer's report.

I do want to call to the attention of the commission a map which has been filed in duplicate, and which shows the position of the plant and a number of details which I think will be important and interesting. The entire plant is shown. The upper part of the map simply shows the lumbering part. This map shows the 500-foot contour line. That is where the water would come without wind or wave action and without seepage at a level of 500 feet at the Minnesota Power Co.'s dam. That line runs north about 700 feet, including a large part of the mills. There are two mills. The water will stand around and under the mills at 500. We have also shown the 501-foot contour line, which would inclose the entire building.

I do not think that this company's size or its investment is material, but the amount of damage which will be done both to it and to the community is important and material. You can gather an idea of the importance and size of the company's business and its importance to the public and to the community from the fact that it employs an average of 750 men during the running season. It employs an average in all places—that is, in the woods and in the driving of logs—of 1,200 men, and its average monthly pay roll is $75,000.

Mr. Wolff's report and this map will show—and there is not any question about it, it does not need expert testimony to show and to demonstrate—that without adequate protection this plant could not possibly be operated, and there is not the slightest possibility—and

nobody will contend that there is—that it could be protected without adequate protection at a 500-foot level. Not only would the entire district within the 500-foot contour line be actually covered with water, without reference to wind or wave action, but certainly everything within the 501 line—and Mr. Wolff says almost the entire plant of the company, referring not to lumber yards, but to the plant, including the drying shed and the planing mill—would be converted into a swamp. You could not operate it.

Mr. POWELL. That is, from seepage.

Mr. CLAPP. Yes, sir. I will come to the question of seepage in connection with the dike later.

I understand now that Mr. Rockwood is definitely asking that this commission authorize a 500-foot level. To maintain that level would simply mean a loss to the company measured by the loss attendant upon the abandonment of this plant. That loss might be greater or less than the investment in that plant. It might be less because they might reclaim some of their machinery, or most of it, and take it off to some other location. It might be greater because that saving of material would be more than offset by the disadvantages of another location. But I do not think it is necessary to discuss what would result or the damage that would result at a 500-foot level, because whatever it was it would be so large that there is not any power interest or any aggregation of power interests who would themselves at least be willing to compensate the company for the damage which would result.

Mr. MIGNAULT. Does the company operate by steam?

Mr. CLAPP. Entirely by steam. In view of that fact, and so that we might do our duty to the commission and to ourselves, we asked Mr. Wolff to indicate, as far as he could, what measures could be taken, if any, to protect the company if the water were raised, and you will find that Mr. Wolff's report goes very fully into that.

I am not going to go over those details, because they are all presented, not only in his brief, but in just as good a manner as I could present them in the printed brief. There are some elements of damage which are absolutely unpreventable, but he finds that a good part of the damage may be prevented by the building of a dike in front of what we call the boat landing by the extension from the boat landing to the unloading dock, about half a mile.

Mr. POWELL. What do you mean by the "boat landing"—the ferry landing? Is that the ferry boat landing?

Mr. CLAPP. No; that is the company's boat landing. Each year, and throughout the year, they have to have a place where they can repair their boats. This is the only available place on the river. It is right at the western part of the mill company's property.

Mr. MAGRATH. Is it shown on the map?

Mr. CLAPP. Yes. The boat landing is indicated on the map. He has given the manner of construction of that dike. He has suggested it. He has also said that it would be necessary to carry from the boat landing nearly to the unloading dock, about a half a mile, not a dike, because that is absolutely impracticable, but a permanent concrete retaining wall, and he gives the reasons why the dike is impracticable. Of course so far as keeping out the water directly is concerned, that would take care of the company's plant provided the bank or retaining wall were extended, as he says, so far as this

company is concerned, back from the unloading dock and from the west end of the company's property to sufficiently high ground. He, of course, had in mind, having in contemplation that there were landowners above and below, extending it to the Canadian Northern at Pithers Point and down to the dam. In a direct line by the river Pithers Point is about a mile and a half above our plant. It is very much farther by the shore of the lake, and, of course, as far as that is concerned, that will protect us when you get up to the high ground; but, of course, when you get around Pithers Point you will find other land to be diked. Mr. Murray has made reference to that, and has said that that dike would have to be extended around Pithers Point, and that the total length might be 10 miles.

That is not the only thing, and that probably is not the most expensive part of protecting, so far as it can be protected, this particular industrial plant. Mr. Wolff shows that, so far as seepage is concerned, that would have to be taken care of by subsoil drains, not only following the embankment and the retaining wall where there was a retaining wall, but also extending into the company's property. He has also shown that the surface water must be taken care of in another way. Of course, with this elevation, and with this contour of the elevation of the company's plant as it is at present, you could not dispose of the surface water by gravity, so that you would have to construct sewers not only on the company's property, but to carry them down below the dam, or put them out. But you would have to extend those sewers and that branch system for surface water—something different from the subsoil waters—back far enough. He did not go back far enough into the country to find out how far they will have to go.

It also appears that we would have to lift our log slips at their outer ends. We would have to raise the log track. We would have to raise our unloading dock. We would have to put in intake wells inside of where our intake pipes are now. All those things are details which are set out in Mr. Wolff's report, and I am not going into them, because they are so well set out there, and because I have covered them in the brief.

Mr. Wolff has not estimated in dollars and cents how much the protection of this company to this extent would cost, and it would be impossible for him to do so. The main reason is that the protection of this company's plant, so far as it can be protected, must be worked out in conjunction with a general plan for the protection of all of that country along the Rainy River, and around Pithers Point, to the town of Fort Francis. All those things must be worked out as one general, comprehensive plan. If, of course, the commission should ask us to have Mr. Wolff tell them how much it would cost to protect our plant, as far as possible—and I do not see that any of the other properties could be protected—we would do it, but so far as telling how much it would cost to do the work necessary to protect this plant is concerned, it would be impossible to do it without knowing what the general plan was, and whether that plan was suitable, sufficient, and satisfactory to the other riparian owners and to the town of Fort Francis.

Mr. GLENN. Did I understand you to say that a head of 500 feet would ruin your mill property?

Mr. CLAPP. Absolutely; that is, it would make it absolutely impossible to operate it.

Mr. GLENN. Would you have to move it?

Mr. CLAPP. You would have to move it unless you put in the protective works. Mr. Wolff has reported that if you had put in those protective works—although he has not said in dollars and cents how much they would cost, but I know it would cost a great deal of money—it would not cost as much as it would to abandon the plant. Mr. Rockwood in his brief said that he was going to furnish an estimate of the cost of those improvements. Have you furnished the commission with them, Mr. Rockwood?

Mr. ROCKWOOD. Yes; I have an estimate, Mr. Clapp. I hoped you would have an estimate. We had to have it made rather hastily, but I have an estimate.

Mr. CLAPP. An estimate of doing the exact things that Mr. Wolff has suggested?

Mr. ROCKWOOD. Yes.

Mr. POWELL. What is the amount, Mr. Rockwood?

Mr. ROCKWOOD. The amount of doing precisely what Mr. Wolff has suggested is $180,000, or something of that kind. Our engineers say an equal protection can be furnished for $100,000, equally effective. That includes a dike down the whole front of Fort Francis to the falls.

Mr. CLAPP. As I say, until we know whether the dike was to be carried back to high lands so as to simply protect us, or what was to be done above or below, and what the extent of this large district over here which would have to be drained for surface water would be, it was impractical for us, unless we gave the figures on all possible hypotheses, to give the figures as to the cost. If Mr. Rockwood says $180,000, I can simply say that we would be willing to have Mr. Wolff check those figures. I understood from him that it would run into the hundreds of thousands. But whether his idea would be more when he came to the exact estimate I do not know. There are, as Mr. Wolff points out, unpreventable damages, damages which could not be estimated in that way. They might be estimated in a way in dollars and cents, but not included in the cost of making these protective works. We suggested that because we know that nobody wants under any circumstances to destroy that plant; of course not Mr. Rockwood's clients.

Mr. ROCKWOOD. Oh, no.

Mr. CLAPP. And that is the reason we suggested that the damage might be minimized, if the commission ever comes to consider this question, and in doing this I think we have done our full duty. There are elements of damage which can not be prevented.

Mr. TAWNEY. When was your mill built?

Mr. CLAPP. The first mill of the present company was built in 1911. The second mill was built in 1913. I am giving the dates when they started operations.

Mr. TAWNEY. The first one was built in 1911 and the next one in 1913?

Mr. CLAPP. They may have been started in 1910 and 1912, but that is the time of the commencement of operations. I am not as familiar with this matter as I might be, but I think there was a mill there before.

Mr. MURRAY. It has only been there two years.

Mr. CLAPP. I think there was an old property there before.

Mr. TAWNEY. In constructing the mill there, either the second one or both of them, did you not take into consideration the possibility of high water in the lake independent of any artificial construction?

Mr. CLAPP. Unquestionably that was done in selecting the site. This site is absolutely safe. We have no fears, and there is absolutely no danger to the site with the water maintained at its ordinary and natural level. I do not mean to say by that that there has not been a time when the water has not been for a few hours or for a few days, during a time of great precipitation and extreme flood, very high. Of course, every company which selects a plant anywhere near any river takes the chances, and must take the chances, that there will be for that short period of time such a stage of water. But that is far different, of course, from establishing a point to which the water may be raised permanently. The only thing to have done was not to have selected that site at all, and it was perfectly proper and perfectly reasonable to select that site, or to have gone in and raised that whole land 3 feet before you started to build. Of course, that would have made the site impracticable, and it would not have been selected under those circumstances.

Now, I want to repeat that there are unpreventable damages, some of which are, I believe, used by Mr. Wolff. The difficulties of the plant will be increased somewhat at least by the doing of this work. There will be a damage to the land which we own in fee which would be estimated in dollars and cents. It will not be prevented by these prospective works, but there will be an absolutely necessary damage consequent upon interruption of the operation of the plant during the construction of these improvements. Those things are not included within the improvements, and can not be prevented by the construction of these improvements.

Mr. MAGRATH. You are speaking of the water being raised above 497?

Mr. CLAPP. Yes; and I am coming to your proposition in a minute as to whether the commission should at the present time consider that. But I am just explaining the data which we have filed with the commission, and I would say this, that while the level of 497 is a little too high, it does not interfere materially. We have rip-rapped the entire shore from the boat landing in front of the plant up to the unloading dock. That has all been rip-rapped, and it has been filled in behind with piles and gravel. It was rip-rapped at our expense. We have no objection to that. We have no objection to the maintenance of the 497 level. We have no objection to the way in which the level has been controlled in the past. But we do show that a level of 500 would be immediately destructive of the plant unless you took these protective measures. If you did take the protective measures, there would be so much cost and so much damage that could not be prevented even by those.

Now, I want to call attention to the fact that while the data which have been collected by the consulting engineers of the commission, so far as levels, the history of levels in the Lake of the Woods, the results which will follow the establishment of any particular levels, the percentages of time during which any particular maximum level will prevail, so far as that data relates to

the Lake of the Woods, it is very full and complete. The data which they have collected relating to Rainy Lake, so far as it was necessary to collect data, to show how the levels in the Lake of the Woods could be regulated, and what was necessary in Rainy Lake to regulate the levels of the Lake of the Woods, are also complete. But when we come to examine the report and the data of the consulting engineers as to the effects of maintaining any level in Rainy Lake higher than 497, when we come to consider the effects, either upon riparian owners, upon industrial plants, or on the city of Fort Francis, we see there is a natural reason for it. The consulting engineers did conduct their investigation, so far as they needed to conduct it, in order to determine how the waters of Rainy Lake should be maintained and controlled in order to maintain certain levels in the Lake of the Woods. But when they had concluded, as they did conclude, that there was a storage capacity at present on Rainy Lake sufficient, from the viewpoint of the regulation of the levels of the Lake of the Woods, then I can see that it was very natural that they did not extend their data, extend their investigations, so far as Rainy Lake was concerned, to the same extent that they did the Lake of the Woods. The question has come up here to-day as to what the high-water mark is in Rainy Lake, and I do not think that we find the same definiteness in the reports of the engineers. Of course, that was not possible, either. We find that their conclusions upon that point are as definite as upon the Lake of the Woods. Likewise we find that they have made only reconnoissance examinations to determine what lands will be flooded at a 500-foot level in Rainy Lake, but no extended examinations, and no estimates of damages, and, so far as the north bank of Rainy Lake is concerned, where by far the greatest damage would be done, we have no data whatsoever.

Mr. POWELL. About what portion of the north bank, above the falls or below them?

Mr. CLAPP. Above the falls there is absolutely no data so far as the consulting engineers are concerned.

Mr. POWELL. No contours of the country?

Mr. CLAPP. No. The consulting engineers did not go into that. As I say, that, from their standpoint, unquestionably the natural and the right thing to do, but when you are considering, if you do consider—and I do not think you will ever get to the consideration of the question of raising the waters of Rainy Lake above 497—if you do get to that, I think you will find that the problem presented, from Pithers Point at least to the dam, is of such a serious character that a special study must be made. You must make a special study—it is possible you will have to hold further gatherings—as to a plan of protection at a 500-foot level, or any level over 497, that that is absolutely necessary, that under this present record this commission would not be justified for a moment, if they are considering the question on its merits, of authorizing a raise of an inch in Rainy River or Rainy Lake.

Mr. MIGNAULT. Above 497?

Mr. CLAPP. Above 497.

Mr. MIGNAULT. You are satisfied that up to 497 the record is complete enough to make recommendations to the Governments?

Mr. CLAPP. We certainly would have no objection, because we have no objection to the maintenance of that level, but the record is very much more complete up to that level than it is with reference to the entire level.

Now, I want to make one more suggestion, or contention. It is referred to in the brief, but I want to emphasize it at this time, because I have read this whole record and studied it as carefully as I could, and the thing which impressed me more than anything else is the proposition which I am about to state, and that is, that unless you reject the conclusions of your consulting engineers, then you are not justified, under the present reference, in inquiring into the question of the advisability of authorizing or recommending an increase above 497 in the level of Rainy Lake and Rainy River. You will notice Mr. Murray made much the same point, but I do not state my proposition as broadly as he does, because it is not necessary. I can conceive very readily that it was the duty of the commission and of the consulting engineers, and that duty had been performed, to determine whether, in order to maintain that level in the Lake of the Woods, it was most advisable from the standpoint of all of the different interests to inquire whether it was necessary to have additional storage on Rainy Lake. I can very well conceive—I do not know but what I may concede—that under this reference it was the duty of the commission, and is had the power to determine that question. The engineers, I think, have determined it, so I say, and put my proposition in this form, that unless you reject the conclusions of your consulting engineers, you are not justified, under the present reference, in inquiring into the advisability of raising the levels of Rainy River and Rainy Lake.

I want to refer to the particular portions of the reports of the engineers which I think justify that statement. I am just going to read very short extracts, and possibly I will not get them in the proper order, but these are the extracts which have impressed me, and I think they fairly express the final conclusion, so far as this report shows, of the consulting engineers. I am reading from page 208 of the text of the engineers' report:

> From the standpoint of equalization of flow alone it may be stated that if the upper Rainy reservoirs are to be operated according to method B, additional storage capacity over and above the 100,000,000,000 cubic feet at present available can not, economically, be provided. If storage on the upper lakes is feasible at all, it must find its justification primarily in the increased advantages resulting from a reduction in the extent of the fluctuation of the level of Rainy Lake itself, coupled with such benefits as may be derived locally—

That is, at International Falls, I assume—

> from the storage of water in the secondary reservoirs.

Again, on page 209 the engineers say:

> The effect of the various methods of regulating outflow from Rainy Lake on regulation of the levels and outflow from Lake of the Woods will be discussed later. Yet, it may here be commented that, from the viewpoint solely of the advantageous utilization of the waters of Rainy Lake, the more desirable method of regulation is clearly that termed method B, and which, as before stated, aims to utilize for power development the greatest amount of water without making any attempt to substantially increase the extreme low-water flow.

The engineers find that there is at present available for storage on Rainy Lake 100,000,000,000 feet.

They say, on page 211:

As has been pointed out, the storage capacity required for the greatest practicable equalization of flow from the viewpoint of the regulation of the levels of the Lake of the Woods is already available.

If that is so, if from the viewpoint of the regulation of the levels of the Lake of the Woods, at whatever level your honors may fix in the Lake of the Woods, there is at present enough available storage on Rainy Lake, then, in considering whether there should be further storage on Rainy Lake your honors would be considering a question which I think is entirely beyond the reference. As I said in the first place, so far as your investigation of Rainy Lake and Rainy River is concerned, I think you had the power, and that it was yuor duty, to determine whether there was another dam to be erected some place, whether the waters in Rainy Lake should be raised, and if that would affect the maintaining in the Lake of the Woods of the level which you should find to be the best level from the standpoint of the interests of all of the users of the waters. What is the reference? I am not going to take very much time about this, because all of this is undoubtedly impressed on the commission already.

Mr. Powell. See if I grasp your point thoroughly. Is it this, that the reference deals with Rainy Lake simply as incidental to the maintaining of a uniform level on the Lake of the Woods and the utilization of the waters that flow therefrom?

Mr. Clapp. Yes, sir.

Mr. Powell. That that end is subserved best by a storage of 100,000,000,000 cubic feet of water?

Mr. Clapp. Subserved just as well.

Mr. Powell. Just as well. You say that anything beyond that would not be incidental to the further development of the power of the Lake of the Woods, but would be for the purposes of a local development at International Falls?

Mr. Clapp. Yes; and would be substantially, and I think wholly, unrelated to the subject of the reference.

Mr. Powell. For another and an additional object?

Mr. Clapp. Yes; for another and an additional object. It is not related to the levels of the Lake of the Woods.

Mr. Powell. I think the more storage provided the easier it is to regulate the Lake of the Woods. It strikes me as a self-evident proposition that the larger the amount of storage you have the greater is the facility for regulation.

Mr. Clapp. Then, it seems to me that if you should find that way, you would be rejecting the conclusions of your engineers.

Mr. Mignault. It has been suggested that the excess storage could be obtained on the upper lakes without raising the level of Rainy Lake above 497.

Mr. Clapp. That, of course, is unquestionably true. If you need excess storage above International Falls for the purpose of regulating the levels of the Lake of the Woods, the raising of the levels of Rainy Lake is not, of course, the only alternative. There might be further storage, and while Mr. Rockwood has shown that enough additional storage would be available in other lakes, I want to call the attention of the commission to the fact that with reference to an increase in storage, even with reference to the present storage, the consulting engineers in the report say that their examinations have

not extended to the question as to whether or not, if there were further storage advisable, it should be in Rainy Lake or in the upper lakes. They say that on page 211. So, so far as that is concerned, this commission has not before it, certainly at the present time, if it should consider that it had the power and that it was justified in considering the question of a raise in Rainy River and Rainy Lake, the data, either from private interests or from its own consulting engineers, and a large part of its necessarily coming from its own consulting engineers, to determine where that storage should be.

The first two questions there can not be any question about.

Mr. POWELL. Suppose we take this view of it; the action of the engineers will be thoroughly and completely justified. We have gone far enough to see what the end is going to be, and however interesting it might be to go into the matters as minutely as we did in the case of the Lake of the Woods, yet it is not necessary in the case of Rainy Lake.

Mr. CLAPP. Not necessarily, if you are going to hold the waters at 497.

Mr. POWELL. We have gone far enough into it to see that to obtain a higher level than 497 is not desirable in the interest of economy. We have gone far enough for that.

Mr. CLAPP. Not only in the interest of economy, but that it is not necessary. I think that is the conclusion of the engineers as gathered from this report.

Mr. POWELL. The economic feature is one that is usually the controlling feature. But, independent of that, you must conclude that the larger the quantity of water you have under control the better when you are going to equalize the flow from the reservoir.

Mr. CLAPP. I want to call your attention again to this passage on page 211, and this summarizes, as I think, the conclusions of the engineers on this point. This does not deal with the economic feature. Of course, that was one of the things they considered, but this was not based on it.

Mr. POWELL. They expressly refer to the economic feature.

Mr. CLAPP. In one place. In another place, which possibly I have not got marked, they say that greater storage on the upper Rainy Reservoir is neither economic nor necessary. They say:

> As has been pointed out, the storage capacity required for the greatest practicable equalization of flow from the viewpoint of the regulation of the levels of the Lake of the Woods is already available.

Unless that does not express their real conclusion, or unless the commission does not think that it should accept that conclusion, but shall find that it is incorrect, then we contend that there is nothing in the reference which would justify or empower you to go into the question of the advisability of greater storage on the upper Rainy Reservoir.

The first two questions are:

> In order to secure the most advantageous use of the waters of the Lake of the Woods and of the waters flowing into and from that lake on each side of the boundary for domestic and sanitary purposes, for navigation and transportation purposes, and for fishing purposes, and for power and irrigation purposes, and also in order to secure the most advantageous use of the shores and harbors of the lake and of the waters flowing into and from the lake, is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and if so, at what level?

I need not refer to the second question. That, of course, refers to the Lake of the Woods.

3. In what way or manner, including the construction and operation of dams or other works at the outlets and inlets of the lake or in the waters which are directly or indirectly tributary to the lake or otherwise, is it possible and advisable to regulate the volume, use, and outflow of the waters of the lake so as to maintain the level recommended in answer to question 1.

As I have already said, so far as your inquiry is directed to ascertaining whether further storage on the upper Rainy watershed is possible, so far as your investigation goes in that direction for the purpose of regulating the levels of the Lake of the Woods, then you are entirely not only within your general jurisdiction, but I think within the reference, and if I differ with Mr. Murray in that regard, you will take the better of the two contentions. But I do not think, as I say, that you can accept the conclusions of your engineers and at the same time feel or actually be within your powers under this reference when you even consider the advisability of an increase in the levels of Rainy Lake and Rainy River.

Possibly I may be able to illustrate my meaning, and to illustrate the argument, if your honors are interested in it, by taking two examples of advantage, which I understand might result from greater storage on Rainy Lake, and it is a question of your power under this reference to go into that question, to say whether they are incidental to or relate to the control of the levels in the Lake of the Woods.

Take, first, the advantage which might result, or which might be claimed to result, and which Mr. Rockwood has claimed would result, to the water powers in the Winnipeg River. I will say now that in going into this question and using this as an illustration I do not want to be accused of setting up a man of straw, so far as Mr. Campbell is concerned and Mr. Laird is concerned, because neither of them made the contention, as I understand it, and maybe neither of them would—I would be greatly surprised if they did. Neither of them made the contention that they desired or would stand sponsor for an increase in the level of Rainy Lake and Rainy River. But Mr. Rockwood did specifically make the point that it would benefit the power users on the Winnipeg River to have increased storage on Rainy Lake.

In saying that he used a slip of paper which had been furnished by the engineers on Tuesday, and I think furnished to the commissioners—at least, furnished to me, also—showing what increase there would be in the minimum utilizable flow in the Winnipeg River by assuming at the outlets of the Lake of the Woods method of regulation known as method A, and by further assuming increased storage in Rainy Lake of 50,000,000,000 feet. That is, he shows what the increase would be.

Mr. Rockwood called attention to the fact that if we assume the average flow from Rainy Lake to be 8,000 cubic feet per second, the flow, as he said, in the Winnipeg River would be 11,700 cubic feet per second, with 100,000,000 cubic feet capacity, and 12,120 cubic feet per second if, under the same conditions, there had been 150,000,000,000 cubic feet of storage on the upper Rainy watershed, and that is a difference of 420 cubic feet per second. Mr. Rockwood, undoubtedly without any intention to mislead, translated that 420 cubic

feet per second, as shown on this slip, into horsepower by calculating the entire fall in the Winnipeg River, and at the outlets, and multiplying it by the usual factor, and he arrives at something over 4,000 horsepower more than you would get in the Winnipeg River, if you had 50,000,000,000 feet more of storage in the Rainy Lake.

That deduction is not justified in the slightest. This was prepared by the engineers, I think, to show what the difference in the minimum flow would be—not the average flow, but what the difference in the minimum flow would be—in the Winnipeg River if you assume method of regulation A at the Lake of the Woods and method of regulation B on Rainy River. That is the minimum, not the average, flow. That is the flow which might be expected in cycles of 25 or 30 years, which might drop below the larger of these two amounts, possibly, for one or possibly two years in 25 or 30 years, possibly never again in the history of those lakes, but only for a year or two years in 30, and reaching this difference in maximum of 420 cubic feet per second only for a short period during that time, and that is simply the crest of the difference, if I may so express it. This whose computation assumes method of regulation known as A on the Lake of the Woods. If method of regulation B is used on the Lake of the Woods, the report of the engineers shows what the difference in the average flow would be, and shows it to be considerably less than 1 per cent—six-tenths of 1 per cent. I want to call your honors' attention to the fact that all these figures are based upon a hypothesis of the use of method A at the Lake of the Woods, and I do not think that that is a fair hypothesis, because after reading this record I do not believe anybody could reasonably conclude that the power users on the Winnipeg River are going to throw away 4,000 to 4,500 cubic feet per second of average utilizable flow in order to save during one or two years in a 25 or 30 year cycle, a difference in minimum of 420 cubic feet per second, and while I do not like to use the word, it seems to me that to have it contended before this commission that anything should be done on the assumption of the use of method A on the Lake of the Woods, that anything should be done on that assumption because on that assumption a slight increase in power might be obtained, is almost a subterfuge, because I do not believe that the power users on the Winnipeg River are going to throw away 30 per cent of the average utilizable power in order to save 3 per cent in their minimum flow during a period of 1 to 2 years in 25. Furthermore, of course the assumption of method A on Lake of the Woods has been pointed out. It means an immense outlay, necessarily, at the outlet to increase the openings. It assumes that the power users will not have stand-by steam plants—that is, the water powers on the Winnipeg River, and I honestly do not believe it will be many years before, no matter what you do, they will conclude that they have to have auxiliary steam plants.

Mr. POWELL. As a factor of safety?

Mr. CLAPP. As a factor of safety. I do not think there is any power that is developed for domestic uses which is carried as long a distance as that where you will ever find it practicable, where there are two competing plants, and where one of them has a steam auxiliary plant to operate one of them without a steam auxiliary plant. But this is small enough, I think, as I have shown, and if you offer to give the power users on the Winnipeg River method A,

and let them use method A, they never will do it. I think they are using that, such of them as are using it, as a sort of subterfuge, and ask you to give them something which will not result in any benefit on the Winnipeg River at all, but will at International Falls, without any question.

But let us assume all of these things. Let us assume that they are going to use method A on the Lake of the Woods, and let us assume that they are going to have those stand-by plants. If they did, they would not need anything to protect them on this decrease in the minimum flow of 420 cubic feet per second. Let us assume that there is that much benefit, and the difference of 3 per cent in the minimum flow of 2 or 3 years in 30, or possibly never, as I say. Let us assume all that. Let us assume there is that benefit, slight as it is. The exact question is, Are your honors justified in considering that factor in determining whether you will authorize additional storage, or recommend additional storage, on the upper Rainy watershed? I think not.

Suppose you find that the maximum level in the Lake of the Woods ought to be 1,062.5, or even 1,063, whatever the power users in the Winnipeg district say is the most to their advantage; let us assume you find that. Let us assume that you find that the range of levels should be 7 feet. That is as high as any of them have gone. I think the more reasonable, possibly, are less than that, but of course that makes no difference to us. Let us assume that you find both of those things—what the level should be to provide for the most advantageous use of the waters of the Lake of the Woods and what range there should be in those levels. Whatever you find as to what that range should be, or the maximum should be, the regulation of the waters of Rainy Lake and Rainy River, and their control, are such with the present available storage that you can maintain those levels and maintain those ranges. Then is it not a fact that when you come to consider whether you should authorize increased storage in the upper Rainy watershed, when you come for the purpose of making this difference, slight as it is to the Winnepeg power interests, it being possible to maintain whatever level is best for them, and whatever range is best for them, with the present available storage on Rainy Lake, would you not really be inquiring into the question as to whether, in order to give 4,000 extra horsepower in a certain year to the power interests on Winnipeg River, it would be advisable to create 50,000,000 additional storage on the upper Rainy watershed?

It would not seem to me that there is any question about it, assuming that the report of the engineers and their conclusions are properly made and that the commission will accept them.

Now, to take another illustration, take the plant at International Falls. When we get there we do not have to speculate about what the advantage will be in a larger storage. It will be easy to state the proposition; at least, that there will be advantage to the power company there. For instance, the engineers say that for every foot of increased head on Rainy Lake and Rainy River there will be 800 to 900 additional horsepower available at the plant at International Falls. Of course, it does not appear in the record what the actual figure is, but nobody will think and nobody will contend that if you authorize a maximum in Rainy Lake 3 feet above the present maximum the average head at International Falls will be 3 feet higher

than it is at present. I do not think we have the figures from which we can determine.

Mr. ROCKWOOD. Why not?

Mr. CLAPP. Because, while you may be able to get to 500 feet every year, you will not be able to stay there as long. The average increase in head will not be 3 feet. If I am mistaken about that, of course the engineers will correct your honors in consultation, and I do not know what they think about it. If we could determine, as we can on the Lake of the Woods, from their estimates, the percentages of time during which there would be certain levels on Rainy Lake, then we could determine, possibly, what increase there would be in the average head at International Falls. I am not a technical engineer, but I will make this statement and ask your honors to ask your consulting engineers about it, to see if it is not absolutely correct. I say that the power company at International Falls could not hope to exceed 2 feet.

Mr. TAWNEY. Average?

Mr. CLAPP. Average head, certainly. That is the advantage they get. I should say not to exceed 2 feet, and I doubt very much whether it would not be closer to 1 than to 2. If it were 2 feet that would give 1,600 additional horsepower at International Falls. That is something that is real; that is something they would get. There is not any question about that. Nobody could dispute that or would want to dispute that. Besides that, they would get 247 cubic feet per second additional average flow that could be translated into horsepower, something around 200 horsepower from increased average flow by virtue of this rise in the maximum.

So let us say it would be 1,800 horsepower, whatever the value of that horsepower is at the International Falls, could be translated by the proper factor into money actually required to be invested in order to obtain these advantages, if it is solely to the advantage of the company, and I do not see that this could be computed.

There is something real to talk about, and I can say that I fully appreciate the wish, the desire, of the power company at International Falls to have that additional power. I can almost say that I sympathize with their position.

Mr. ROCKWOOD. Almost?

Mr. CLAPP. But let us inquire as to the relevancy of that fact, that they would get more power by additional storage, what relevancy has that fact and what weight should be given to it by the commission in deciding the questions which are referred to it? It does not make any difference that they get more power. By giving them more power you can not better regulate the levels of the Lake of the Woods. It does not make the slightest difference in the regulation of the levels of the Lake of the Woods, as I understand it, or, if it makes a slight difference, the difference is so small that from your viewpoint, as the engineers decided, there is plenty of storage available at present in Rainy Lake and Rainy River.

Now, take this specific question, as to whether it were advisable, from the standpoint of all interests—that is, weighing one interest against another, weighing the cost of doing a thing with the advantages resulting from doing it—I am not saying that the question as to whether it would be advisable to raise the waters in Rainy Lake to give more power at International Falls is not a question which

could not be referred to you, not at all; I think possibly and probably that question could be referred to you under article 9 of the treaty, but it seems to me that the question is not what might be referred to you, but what has been referred to you. This commission, when it acts under article 9, is much like a court of limited jurisdiction. For instance, in our State we say that the probate court has jurisdiction of the estates of deceased persons. That is the expression which is used in speaking, that the probate court has jurisdiction of the estates of deceased persons. It has. If my friend, Mr. Hilton, were so unfortunate as to eat too much to-night and die here, as he is a resident of Ramsay County, it might be said on the day he died that the probate court of Ramsey County has jurisdiction over his estate. In one sense, but in a loose sense, it has jurisdiction; but in the true sense and in the actual sense, in the sense of actual and real jurisdiction which it can exercise, it has no jurisdiction until the proper petition has been filed by the proper party invoking the jurisdiction.

Mr. POWELL. That simply means you have to adopt the machinery to apply the jurisdiction in the individual case.

Mr. CLAPP. Yes; and so until the two Governments in the form and in the manner provided in the treaty have formally referred a specific question to this commission, it is not within its jurisdiction in the actual or real sense, althought it is one of the subject matters which may be brought within its jurisdiction by the proper form of procedure.

That, I think, is all that I care to suggest, but I want to say, however, that we filed the engineers' report, and our statement and the brief and this map. The map is filed in duplicate, and I will give Mr. Rockwood a copy.

Mr. TAWNEY. All these exhibits should be filed in duplicate, one one for the office here and one for the office at Ottawa. The rules of the commission also prescribe the number of printed copies and briefs that should be filed when they are presented in printed form.

Mr. CLAPP. I have not read the rule. Will you tell me what it is?

Mr. TAWNEY. Twenty-five for each office.

Mr. CLAPP. I have plenty here for present use, but not for that purpose.

Mr. TAWNEY. You can supply them later.

Mr. CLAPP. Yes, sir. I really believe that when the commission comes to consider this question of their power or their right to inquire further, accepting the conclusions of its engineers, of course, into the advisability of further storage on Rainy River, that they will find and will be satisfied that they will not be justified in doing it. But in the event that they do not so find we will furnish anything further that we can or will cooperate with the commission in any way that we can.

I do not know or understand that there is any controversy with us as to what would result if the water were raised to 500 feet. If we were driven off that piece of land, I do not understand that there is any disposition on the part of anyone to deny that we would be entitled to be reimbursed for whatever loss we incurred, or for whatever the commission thought best to do to try to protect us, whatever it cost to protect us. So I have not discussed that. I have not discussed the question of average, ordinary high water, questions of

power of the power company to conduct the case. I do not want to go into those questions. I do not feel that we have any controversy about those questions.

Mr. MAGRATH. Assuming that the commission concluded that there should be a level of, say, 498, do you understand that under the reference to the commission it is called upon to value the flooded area of your clients?

Mr. CLAPP. No. But, as Mr. Commissioner Powell expressed it this morning, if the commission were to consider the advisability of a raise to any extent in the present authorized level of Rainy Lake it would consider it with reference to its advisability. One of the elements in its advisability would be the cost of doing it, either to the governments or to the power companies, and I am inclined to think that the commission, while it has no power to determine what the damages should be, as it is with reference to the Lake of the Woods, should take into account the cost of doing a thing, or what would result. Supposing we could not protect our plant in any way it would wipe it out. That would be an element to consider in determining the advisability, if your honors ever come to that question.

Mr. POWELL. All those questions would.

Mr. CLAPP. But, of course, it is not necessary for you to determine damages in the same way you do with reference to submerged lands in the Lake of the Woods. The questions, so far as Rainy River is concerned, are vastly more complicated than anything that could arise on the south shore of Lake of the Woods. There so much land is overflowed which has a good value.

Mr. MAGRATH. What I really wanted to get from you was your opinion as to whether the commission is called upon under this reference to determine the value of submerged land at points other than around Lake of the Woods.

Mr. CLAPP. Would you find that at levels between 497 and 500, or are you referring to levels below 497 or including that?

Mr. MAGRATH. Including that.

Mr. POWELL. Take it both ways.

Mr. CLAPP. I think you are asking me a question which, so far as it affects levels or refers to the levels below 497, I am not interested in. But I will say this, that the commission finds a level of 497 there, and I assume that the commission could find that it was advisable to have, for the purpose of regulating the levels of the Lake of the Woods, the works which are already there, and which the engineers have taken into consideration in all of their estimates as to the levels of the Lake of the Woods; so that the commission might very well find, if the facts justify them, that the dam there, and those controlling works, which will assist in regulating the levels of the Lake of the Woods to a certain extent, are proper or necessary in order to regulate the levels of the Lake of the Woods, possibly. I do not know whether the record is full enough or not. If they did, then I should say that it is pretty hard to answer that question. All the parties have appeared here. We are not interested. [Laughter.] All of the parties have appeared and say they consent to it.

Mr. MAGRATH. Suppose I were willing to think that, even maintaining the 497, the Shevlin-Clarke property was going to be damaged to the extent of $100,000; would you be disposed to think I would be

justified, under the reference, in undertaking to say what the damage would be?

Mr. CLAPP. I would, of course, in that case be guided by the status of our claim at that time. I am very much inclined to think that we, if we had been damaged to the extent of $100,000, we possibly would have better standing in the courts than anybody else at present.

Mr. GLENN. If we decide it is necessary for us to make this at 497 for the purpose of getting that storage up there we should have, and by means of that you had been damaged, we ought to make some kind of a recommendation.

Mr. CLAPP. I think you must find out what the damages are, because you can not tell whether it is advisable or not until you find out what the damages are; and, as I say, without a protective plan you would find that the damages would be so large that there would not be any question about it. I repeat that certainly before you can make any recommendation for a 500-foot level, or any level higher than 497, your engineers, or other special engineers, will have to make a complete study of the whole situation between Pithers Point and above Pithers Point to International Falls—would have to work out a complete plan to the satisfaction of all parties, and then find out whether that would be sufficient; and that plan would have to take in possibly the consideration of navigation in the river and the means for crossing the river, and a great many things. You have no record at present upon which you could decide the question.

Mr. TAWNEY. Mr. Clapp, your plant is at Fort Francis, on the Canadian side of the Rainy River?

Mr. CLAPP. Yes, sir.

Mr. TAWNEY. Above Fort Francis; how far above?

Mr. CLAPP. I can express it by saying it is a mile above the dam in the town.

Mr. TAWNEY. Do you maintain an office in Fort Francis?

Mr. CLAPP. Yes.

Mr. TAWNEY. You have a manager there?

Mr. CLAPP. Yes.

Mr. TAWNEY. You have stated here in your brief, at the opening, what I do not think ought to be allowed to go into the record without question. You say here:

> Apparently without fault on the part of anyone, Shevlin-Clarke Co. (Ltd.) had no notice of the hearings held before the commission at Warroad, International Falls, and Kenora, in September, 1915. Nor indeed had it any notice or knowledge, prior to the date next hereafter referred to, that the commission was considering or about to consider the question of the advisability of levels on Rainy Lake and Rainy River higher than those now (and for the past several years) maintained.

I desire to call your attention to the fact that that statement is not exactly the correct statement of the fact, and it is to some extent a reflection upon the administrative officers of the commission—at least the secretaries.

Mr. CLAPP. It certainly was not so intended.

Mr. TAWNEY. Because they did have notice.

Mr. CLAPP. In what way?

Mr. TAWNEY. It was published notice. It was published for some considerable time in the newspapers at Fort Francis, and the sec-

retary of the Canadian section of the commission informs members of the commission that they also had direct notice. Your manager did not notify your people in Minneapolis. I know how Mr. Rahn happened to see it in the newspapers in Minneapolis that there was going to be a hearing, and he came up there to find out what the effect might be upon their property, and that is how Mr. Rahn accidentally saw it in the Minneapolis papers. But your manager at Fort Francis certainly must have seen the notice in the newspapers, and it was a matter of public notoriety for 60 days before the commission arrived in Fort Francis last September that we were going to have this hearing.

Mr. POWELL. Mr. Burpee is here and probably would like to say something.

Mr. BURPEE. The town clerk of Fort Francis was particularly asked to notify everyone on his side in and around Fort Francis.

Mr. POWELL. I particularly asked that all these interests should have notice. I was seeking that very strongly, indeed.

Mr. TAWNEY. It was a matter of public notoriety.

Mr. CLAPP. We had notice of the first hearing.

Mr. TAWNEY. In the first hearing at International Falls your company entered its appearance through J. E. Mathieu, vice president.

The Shevlin & Clarke Lumber Co. (Ltd.); head office, 829 Palace Building, Minneapolis; branch office, Fort Francis, Ontario; T. L. Shevlin, president; J. E. Mathieu, vice president.

That was under the head, "The following interests were notified by letter." That was in 1912.

Mr. CLAPP. Yes; I saw that. They were notified by letter in 1912.

Mr. TAWNEY. And published notice has been given ever since for 60 days, published in Fort Francis.

Mr. CLAPP. Mr. Commissioner, I do not know whether you know, possibly Mr. Rockwood knows, that while they might have a manager there at Minneapolis, it is more or less of a centralized organization, taken as a whole.

Mr. TAWNEY. I know it.

Mr. CLAPP. And the people who would have to attend to such a thing, the Minneapolis office, did not actually know it.

Mr. TAWNEY. That is the fault of your managers, not the fault of our secretaries.

Mr. CLAPP. I said here it was not the fault on the part of anyone, and possibly I made that whole statement too strong, but I did specifically say in this statement that the reason that we make this statement is to explain an apparent remissness on our part in not before this showing the interest which we really have.

Mr. TAWNEY. That is true. At the same time it shows some remissness on the part of the executive officers of the commission, too.

Mr. CLAPP. It certainly was not intended to convey any such idea.

Mr. TAWNEY. I do not make any point of it at all, except that I did not want it to stand on the record of the case here without qualification. I wanted to call attention to the fact.

Mr. CLAPP. I think myself that if there was fault on the part of anyone it was more on the part of the company than anybody else.

Mr. POWELL. I thought so, too, until I read on page 2, near the middle, the following:

The foregoing explanation is made, not as a basis for criticism or complaint, for the company has none to make, but to explain the apparent remissness of the company in not sooner advising the commission of its great interest.

Mr. CLAPP. That was the entire purpose of that first paragraph, and if it does contain any intimation that we thought we should have received more notice than we had, we disclaim it.

Mr. POWELL. Before asking a question I have to ask you, let me congratulate you upon your lucid statement and the entire absence of superfluity of language. I would like to call your attention to the language of the submission, in view of the argument you made that we had no right to consider any other interests than that involved in the level of the Lake of the Woods. By the terms of the submission we are functus officio, so to speak, when we consider the interests of the level of the Lake of the Woods and the interests that are connected with it. I call your attention to this:

3. In what way or manner, including the construction and operation of dams or other works at the outlets and inlets of the lake or in the waters which are directly or indirectly tributary to the lake.

That would be the Rainy Lake and all the rest up above. [Continuing reading:]

Is it possible and advisable to regulate the volume, use, and outflow of the waters of the lake so as to maintain the level recommended in answer to questions.

So far there is nothing that conflicts with your argument. Now, to go further:

And by what means or arrangment can the proper construction—

Proper construction means the extent.

and operation—

That is the mode of working—

of regulating works or a system or method of regulation be best secured and maintained.

Now comes the crucial point of the whole business:

In order to insure the adequate protection and development of all the interests involved on both sides of the boundary, with the least possible damage to all rights and interests, both public and private, which may be affected by maintaining the proposed limit.

So that we have expressly to take into account the interests of the International Falls Pulp & Paper Co., as well as every other interest.

Mr. CLAPP. There is no question about it.

Mr. POWELL. So that involves our going further.

Mr. CLAPP. May I make a possible request of you, Mr. Commissioner?

Mr. POWELL. Yes.

Mr. CLAPP. Would you, either in your mind or in your copy of the reference, interline in the first place this phrase occurring at the end of each of these clauses, "so as to maintain the level recommended in answer to question 1."

Mr. POWELL. Yes.

Mr. CLAPP (continuing reading):

And by what means or arrangement can the proper construction and operation of regulating works or a system or method of regulation be best secured and maintained in order to insure the adequate protection and development of all the interests involved on both sides of the boundary, with the least possible damage to all rights and interests, both public and private, which may be affected by maintaining the proposed level in the Lake of the Woods.

Mr. POWELL. Yes. Does not that mean this, that while practically we submit to you the question of the levels of the Lake of the Woods, and all interests affected thereby, in addition to that you are to bear in mind that in that regulation you are best to preserve other interests as well?

Mr. CLAPP. Best to preserve and protect.

Mr. POWELL. Preserve and protect.

Mr. CLAPP. But if you get to any level, if you decide that any level in the Lake of the Woods is the best level, and that any range of level in the Lake of the Woods is the best range, then that can be protected by the control of the waters without your endangering Mr. Rockwood's client in any way.

Mr. POWELL. But not only must be abstain from adversely affecting the interests of Mr. Rockwood's client at International Falls, but we must go further, if it is not inconsistent with the maintenance of the level, and we have to advance his interests in the development of his works.

Mr. CLAPP. I do not think so, and I do not think that upon reflection you will think so. May I use another illustration? Here is Fort Frances; here is Rainy Lake, and some lakes running into it. This does not show the entire watershed, of course. There are a great many other lakes, and I think I am justified in saying that there are other places where dams could be put in and power developments. Suppose Mr. Smith, of Toronto, appears before this commission and says, "If you will permit me to put a dam there"—it might be a great deal farther off and still be in the waters you are investigating in this matter—"If you will permit me to put a dam there I can develop 5,000 or 10,000 horsepower, or I can do it in 25 or 30 years. It is possible to put a dam there, and if you will give me the right to raise the water now I will put the dam in when I can, but only pay damages at present value." But even supposing he says he can put his dam in now and develop the power now. It is a small lake. It has an infinitesimal effect, possibly, upon the control of the flow. It would be so infinitesimal that it could not be measured. But you can see it has an effect upon the flow. It is not necessary that that dam should be there in the slightest degree. It has no effect upon the levels of the Lake of the Woods, or the question of regulating the level of the Lake of the Woods, but in investigating all of these waters, and in looking over all these waters for the purpose of ascertaining what can be done to regulate the levels of the Lake of the Woods, you come to all these waters, and gentlemen come and say, "Let us put a dam here." This man does not even contend that that dam is going to have any effect upon the levels of the Lake of the Woods, but he might say, it seems to me, substantially what your Honor has just said in reference to the power at International Falls. He would find, it seems to me, exactly the same kind of justification for the consideration by you of this project.

Mr. Powell. Do you not think, if that is not going to affect disastrously the interests below, it is our duty to develop that interest on the Canadian side of the line, and if there were a similar one up on the Kettle Falls, that it would be our duty to develop that also?

Mr. Clapp. No; frankly, in the broad sense of the word "duty," it is the duty of all of us to see that natural resources are developed so far as they may be.

Mr. Powell. You have the two interests there placed in juxtaposition, the interests involved in the level of the lake; you have extraneous interests not involved in the level of the lake, and it is our duty to further those extraneous interests if we possibly can.

Mr. Clapp. Certainly; so far as their problems are woven into the question of the regulation of the levels of the Lake of the Woods.

Mr. Powell. Certainly. We should not go to work and pass some measures of regulation that would drown a fellow out and prevent the development.

Mr. Clapp. No. But of course nobody contends that whatever level you fix for the Lake of the Woods—that is, with any possible range suggested—or whatever range of levels you find most satisfactory for the Lake of the Woods in the maintenance of those levels or in their regulation, so far as their regulation is necessary with the waters of the upper Rainy River watershed, there will be the least possible damage or effect to the power interests at International Falls. They might say that, in addition to regulating so far as possible and in the best possible manner, you can give us this much more power. But I think that when your honors come to analyze the powers under your reference you will conclude that that is not a matter which you should consider until it is referred to you. I do not say that it is not a proper thing to have referred to you. I simply say that it has not been referred to you.

I thank the commission for the time they have given me.

(Thereupon, at 6.20 o'clock p. m., an adjournment was taken until Saturday, April 8, 1916, at 10 o'clock a. m.)

Saturday, April 8, 1916.

The commission reconvened at the expiration of the recess, at 10 o'clock a. m., all the members being present except Mr. Glenn.

Mr. Burpee. Mr. Chairman, the following telegram was received yesterday from the Rainy River District Board of Trade:

Fort Frances (via International Falls), Minn., *April 6.*

Chas. A. Magrath,
Chairman Canadian Section, International Joint Commission,
War Office Building, Washington, D. C.:

The Rainy River District Board of Trade, representing every municipality in the district of Rainy River, in meeting assembled this day, by unanimous resolution, request that the International Joint Commission, now sitting in Washington, D. C., embody in their report to their respective Governments a recommendation that locks be constructed at Kettle Falls, Koochiching Falls, and at the Sault Rapids, thus improving navigation in these waters and providing a navigable waterways system from Winnipeg River to the River Namakan, distance of 250 miles, and providing transportation facilities for a country having tremendous natural resources, thereby rendering to the residents of both Canada and the United States along this international waterways highway advantages of incalculable and lasting benefit.

James Paul, *President.*
Joseph Osborne, *Secretary.*

The following letter was also received:

OFFICE OF THE CLERK,
Fort Frances, Ontario, April 7, 1916.

CHARLES A. MAGRATH, Esq.,
Chairman Canadian Section, International Joint Commission,
Ottawa.

DEAR SIR: I have been instructed to advise you of the following resolution of the council of the town of Fort Frances as passed at a special meeting held this day:

Moved by William Floyd; seconded by A. E. Dear:

That the council of the municipality of Fort Francis, in the district of Rainy River, do hereby request that the International Joint Commission do embody, in their report to be made re Levels of the Lake of the Woods and its tributary waters and their future regulation and control, a recommendation that locks be constructed at Kettle Falls, Koochiching Falls, and at the Sault Rapids, thus improving navigation in these waters and providing a navigable waterway system from Winnipeg River to the River Namakan, a distance of 250 miles, and providing transportation facilities for a country having tremendous natural resources, thereby rendering to the residents of Canada and the United States along this international waterways highway, advantages of incalculable and lasting benefit. Under no consideration, however, should the water be allowed to be raised above the 497 bench mark at Fort Frances, as due consideration should be given to the owners of lands upon the water's edge, and a higher level would not benefit navigation to any extent whatever.

Carried.

R. MOORE, *Mayor.*
J. W. WALKER, *Clerk.*

Certified a correct copy of the above resolution under my hand and the seal of the corporation.

J. W. WALKER, *Clerk.*

(The same resolution has been filed by various municipalities of Ontario, including the municipalities of McIrvine, Dilke, Emo, Atwood, and others.)

Mr. GARDNER. Mr. Meyer, inasmuch as reference has been made to your conclusions and deductions relative to the Rainy River survey, do you wish to make any statement at this time regarding that matter?

STATEMENT OF MR. ADOLPH F. MEYER.

Mr. MEYER. Mr. Chairman and gentlemen, the matter to which I desire to refer relates more particularly to certain paragraphs regarding methods of regulation than to matters relating to the surveys or areas. The statement that I expect to make is really an amplification and in justification of the conclusions set forth in certain paragraphs of the text in connection with the regulation of the levels of the Lake of the Woods and the outflow from that lake.

Mr. TAWNEY. I do not understand, Mr. Meyer, that you intend controverting any of the propositions that were made here?

Mr. MEYER. Not at all, but merely to amplify and set forth clearly just what our view is as expressed in our report.

In the first place, on page 208 of the report we say:

> From the standpoint of equalization of flow alone, it may be stated that if the upper Rainy reservoirs are to be operated according to method B, additional storage capacity over and above the 100,000,000,000 cubic feet at present available can not, economically, be provided.

The succeeding portion of the paragraph, in which we refer to the storage on the upper lakes, relates to storage on the lakes above Rainy Lake.

Mr. MIGNAULT. That is to say, Mr. Meyer, it would express your idea upon the fifth line of this paragraph if it were to read, "If storage on the lakes above Rainy Lake is feasible at all."

Mr. MEYER. Yes; if additional storage is feasible on those upper lakes above Rainy Lake; that is, additional storage above Kettle Falls and on the other secondary storage reservoirs on the watershed. That conclusion was arrived at by considering the increase in utilizable flow resulting from an additional storage of 50,000,000,000 cubic feet, amounting to 247 cubic feet per second at International Falls and Fort Francis. This increase in flow represents about 740 horsepower. As the machinery required for its utilization is already in place, the value of this additional water may be taken at $10 per horsepower per annum, and the saving, capitalized at 8 per cent, would represent an investment cost of $92,500, for which it seemed quite apparent that the additional 50,000,000,000 cubic feet of storage could not be provided.

Assuming, next, that part of this storage was to be provided on Rainy Lake by raising the lake to the 500 mark, there would have resulted an average increase in head of about 2½ feet. That is, raising the lake 3 feet would result in an average increase in head of about 2½ feet, assuming that the increase in level was to be used for the purpose of equalizing flow, increasing the storage, and not merely for the sake of increasing the head. That increase in head represents about 2,100 horsepower, which, at a value of $10 per horsepower per annum and capitalized at 8 per cent, will represent $263,000, making a total possible value for the additional 50,000,000,000 storage of $355,500.

While we were unable, with the data at our disposal at this point in the investigation when the text was written, to make an accurate estimate of the probable cost of obtaining this additional storage by means of raising Rainy Lake 3 feet and storing water on the upper lakes, it appeared questionable whether it could be done for any amount of money sufficiently less than this to warrant the conclusion that from the viewpoint of the equalization of flow from Rainy Lake this additional storage could be provided. We concluded that method B was, without question, the more desirable of the two methods, so far as the regulation of outflow from Rainy Lake was concerned.

In connection with the regulation of outflow from the Lake of the Woods, we concluded that there would be an increase of 87 cubic feet per second resulting from the additional 50,000,000,000 increase in storage.

Before I discuss the value of that additional water to the water powers on the Winnipeg River, it is necessary to make a brief statement regarding the cost of developing power on that stream. The investment cost as reported to us for the city plant is a little over $4,000,000, representing an installed wheel capacity of a little less than 50,000 horsepower, only about half of which, according to statements in the record, is now being utilized. On the basis of the installed capacity the cost is $86 per horsepower. If only half of it is utilized, the present cost is twice $86 per horsepower, or $172 per horsepower. The ultimate cost, when the plant capacity is increased to 100,000 horsepower, will be very close to $60 per horsepower on the basis of the figures that have been furnished us covering the installation of the recent addition of about 20,000 horsepower.

Inasmuch as the entire capacity of a plant can not be utilized when a plant is first opened for operation, the cost of the power pro-

duced is, of course, very much greater than the cost will be in the future. A statement was made, I believe, to the effect that the present cost was about seven-tenths of a cent per kilowatt-hour, and that the future cost would probably be about one-half of that.

Assuming that the demand for power increases until the entire developed power is utilized, the minimum cost will be secured at just the time when the plant is running practically up to its full capacity. Then, when a new plant is constructed, there is an additional outlay which, of course, immediately adds again to the cost of the power. Assuming that the final cost is $60 per horsepower and the average initial cost $120 per horsepower, we would have an average cost of about $90 per horsepower; and, assuming 9½ per cent fixed charges, which I believe to be a fair figure, the fixed charges would be brought up to $8.50 per housepower per annum. But on the basis of a 50 per cent load factor the annual cost of power is twice $8.50, or $17 per horsepower; and, adding thereto 50 cents as the annual operating cost per actual horsepower produced brings the cost to $17.50. On the same basis of cost—that is, on a basis of cost comparable with that used in the previous computation—the cost of installing the additional machinery to develop a large amount of flow is about $35 per horsepower.

Considering, now, that all the permanent construction work has been done, the preliminary expenses incurred, the right of way purchased, the towers built, and only the additional cost of copper to be added, together with the cost of the additional hydraulic and electric machinery, and the extension of the length of the power house, as being included in this additional cost of machinery; that brings the cost of the power which can be developed from the additional water to $8.20 per horsepower per annum, or a net saving of $9.30 per horsepower per annum.

On the basis of $9.30 saving per horsepower per annum, 87 cubic feet per second under the present developed fall, assuming the Grand du Bonnet plant built, amounts to $101,000 when capitalized at 8 per cent, which again is not sufficient to provide for the additional 50,000,000,000 cubic feet of storage capacity; and, therefore, we concluded that neither from the viewpoint of the regulation of the levels of the Lake of the Woods and regulation of the outflow from that lake alone, nor from the viewpoint of the regulation of the outflow from Rainy Lake alone, could this additional storage be economically provided.

We were not able to assume that some additional power plant, such as the plant on the Kawishiwi River, at the outlet of Vermilion Lake, or at the outlets of any one of the other secondary storage lakes, would be built in the near future, and that the cost of additional storage would be partly chargeable to those plants, and neither, in the same way, that the additional cost of getting the 50,000,000,000 cubic feet could be provided by cooperation between the powers on the Winnipeg River and the powers at International Falls, and powers which may be built in the future on these upper lakes. But if we combine the savings at International Falls with the saving on the Winnipeg River we get results as follows: Under the present conditions, assuming that we add 50,000,000,000 of extra storage on the upper Rainy watershed, raising Rainy Lake to 500 to provide thirty out of the fifty billion of storage, the interests at

the outlet of Rainy Lake could, according to our previous detailed computations, afford to spend about $355,500. If Method B is adopted on the Lake of the Woods and on Rainy Lake, and a 5-foot draft is provided on the Lake of the Woods, the powers on the Winnipeg River that are at presente developed could afford to pay for that additional storage about $101,000, making a total of $456,500.

Mr. TAWNEY. Mr. Meyer, right there let me ask you whether, in your computations as to the expenditures necessary to produce that result, you have taken into consideration the amount that would have to be expended for lands submerged by reason of the raising of the levels of the lake?

Mr. MEYER. We have made only very rough estimates.

Mr. TAWNEY. Is that item included in your present computation, or is it merely the cost of the dams?

Mr. MEYER. Up to this point I have not given any estimate of cost, except that I have said that the additional storage could not be secured for a certain figure, and that it could reasonably be secured at another figure. I have been giving estimates of the advantages, indicating what these powers might jointly be able to pay for the additional storage, and then an approximate estimate of the cost can be made in order to arrive at some comparison of values. That is the line of argument that I am using here without any attempt at accurately estimating the cost of the additional 50,000,000,000 storage, but I am willing to give you, as a very approximate figure, somewhere in the neighborhood of $350,000 as the cost of securing that additional fifty billion, thirty on Rainy and twenty on the lakes above. That is a very approximate figure given only for general guidance.

Mr. TAWNEY. That includes the value of the lands that would be submerged?

Mr. MEYER. Yes, sir; and the cost of impounding works.

Mr. MIGNAULT. Does it include the damage that would be done to the works of the Shevlin-Clarke Co. (Ltd.)?

Mr. MEYER. Yes, sir. That is the cost of providing the diking and drainage for the town, the cost of buying up all of the lands that would be submerged, and the cost of providing the additional impounding works. It is only a very rough estimate, however, as previously stated.

Mr. SAMUELSON. In that approximation that you have made, have you considered the matter from the point where the water is at present up to the 500 level, or does it include the height of water at what is known as ordinary high-water mark up to the 500 level?

Mr. MEYER. It includes an allowance for some land below the 497 level as an approximate figure thrown in pending the determination of that question.

Following up the previous line of reasoning, if the outflow from the Lake of the Woods is regulated according to method A, for which interests on the Winnipeg River have expressed a preference, and if the outflow from Rainy Lake is regulated on the basis of an average annual discharge of 10,000 cubic feet per second, the additional 50,000,000,000 cubic feet of storage capacity would result in an average continuous increase of 360 cubic feet per second in the regulated flow of the Winnipeg River, which, on the basis of the

fall which is at present developed or under development would, at the previous figures of annual value per horsepower per annum, with interest at 8 per cent, amount to $418,000, or a total of $773,500 as approximately the value of the additional 50,000,000,000 storage to the combined interests on the Winnipeg River and at the outlet of Rainy Lake.

Assuming now that the average discharge from Rainy Lake is 9,000 cubic feet per second, which will probably be more nearly the average annual future discharge from that lake, because every reduction in discharge, due to shutting down of the machinery, and the partial closing over Sunday, reducing the discharge to what is necessary merely for navigation purposes on the Rainy River below, reducing the discharge to 9,000 cubic feet per second from Rainy, with the same draft on the Lake of the Woods, the additional 50,000,000,000 cubic feet of storage capacity would result in an increase of 740 cubic feet per second in the regulated flow of the Winnipeg River. This, when capitalized in the same way as before, amounts to $860,000, or a total of $1,215,500, as the combined benefits if Rainy Lake is regulated as indicated and with the present developed fall on the Winnipeg River.

So far as future results are concerned, the advantage to the powers at the outlet of Rainy Lake, as will be apparent from the figures given, is constant. So far as the advantage to the Winnipeg River is concerned, the results are, of course, greater the more power is developed. Assuming the entire power developed on the Winnipeg River, with method B on Rainy, method A on the Lake of the Woods, 10,000 cubic feet per second from Rainy, and 5 feet draft on the Lake of the Woods, an increase in utilizable flow on the Winnipeg River of 360 cubic feet per second is secured, which capitalized as before amounts to $1,105,000, and when combined with the benefit at the outlet of Rainy Lake amounts to $1,460,500.

Mr. TAWNEY. Per annum?

Mr. MEYER. Not per annum. It is based on the per annum saving. It represents the value of the per annum savings capitalized at 8 per cent.

Assuming now that method of regulationA is adopted on the Lake of the Woods, with 5 feet draft, method B on Rainy with 9,000 cubic feet per second average discharge from Rainy, there is an increase of 740 cubic feet per second in the flow of the Winnipeg River, which, when reduced to annual saving and capitalized at 8 per cent, amounts to $2,270,000, and when added to the saving at the outlet of Rainy Lake would amount to $2,625,500. You can take your choice out of the various assumptions as to which one is applicable in reaching a conclusion as to the desirability of storing this additional 50,000,000,000 cubic feet of storage.

Mr. POWELL. Have you taken into account all possible development, including that at Manitou Falls? It is not a very serious thing as compared with the others, but still it is a factor.

Mr. MEYER. I might add that from the viewpoint of power development only, and assuming that under method of regulation b from Rainy Lake there is sufficient water in the Rainy River to permit of a fairly satisfactory navigation of the river, additional power can be secured much more readily up above than it can at the Long Sault. That development there is just about feasible, and no more can be

said for it. It is somewhat doubtful whether the power can be transmitted to be used in motor-driven pulp-grinding machinery at International Falls. Certainly, if the expense of the navigating lock were added to it, the cost would be quite out of the question.

Mr. BERKMAN. With the development at the Long Sault, could you, without having it transformed into electricity, grind pulp there?

Mr. MEYER. The low head of 10 to 12 feet which will be available there will make it very expensive to install turbines with the necessary speed to drive the grinders at the required speed unless geared machinery is used, so that there are disadvantages in making a development under a low head for the purpose of pulp grinding, on account of the difficulty in getting the necessary power combined with the necessary speed. It results in the use of four or six runners to the shaft, which reduces the efficiency, increases the cost of installation, and makes the plant generally less desirable than where power can be developed under a greater head.

Mr. BERKMAN. Keeping the level as nearly constant as possible at 1,057 would add to that head of storage that you have referred to?

Mr. MEYER. Yes; that would add to the head at the Long Sault.

Mr. BERKMAN. And that addition would increase its value?

Mr. MEYER. It would be worth rather more than what is represented by the actual increase in head.

Mr. CAMPBELL. Mr. Meyer, I understand that without a lock at the Long Sault any installation of a power plant there would put an end to any possible navigation above that point?

Mr. MEYER. Exactly.

Mr. WYVELL. Mr. Meyer, will you discuss the desirability of the power site at the Norman Dam, taking into consideration the fact that it must necessarily be manipulated for the benefit of the power below, and that there must necessarily be a fluctuating head at that point? I would like to have you do that for my own information.

Mr. MEYER. That point has been discussed somewhat in the record. We concluded that, in order to satisfactorily regulate the outflow from the lake, the head would vary a great deal, both because of the lowering of the headwater and the increase in the tailwater, and that the power development at that point would be disadvantageously affected by the regulation of the levels of the lake for the purpose of equalizing flow on the river below, so far as the excavation required in order to bring the water down is concerned and the fluctuation in head is concerned. The development would, of course, to some extent, profit by the increased storage on the lake, resulting in a more equalized flow.

Mr. WYVELL. Comparing those disadvantages of which you speak with the disadvantages mentioned at the Long Sault, will you say which would be the more desirable?

Mr. MEYER. The more desirable of the two sites?

Mr. WYVELL. Yes.

Mr. MEYER. They are both so nearly undesirable that I think it would require a rather detailed study to decide which was the worse.

Mr. CLAPP. As I understand it, Mr. Meyer, you are not making this statement as indicating that you have changed whatever conclusions you had expressed in your report?

Mr. MEYER. Not at all. Our conclusions stand just as they are there. This is merely an amplification of our conclusions and an indication as to how they were arrived at.

Mr. CLAPP. May I ask whether or not in estimating roughly the disadvantages or the cost of storage on the upper Rainy reservoirs the engineers have taken into account any element of damages to the Canadian Northern Railway?

Mr. MEYER. Not of any substantial size. As I indicated before, after considering the maximum and the minimum the matter was lumped off so as to give the roughest kind of indication while we were discussing it here. There are so many factors that are uncertain and regarding which we have insufficient data that we do not pretend to make that as anything like an accurate statement of the additional cost, but merely as an estimate that can be used to guide one in considering whether or not it is likely to be less than $100,000, for example, or more than the million and a quarter, which I indicated as possible benefits under certain conditions.

Mr. CAMPBELL. Can you indicate, Mr. Meyer, what the high-water level, both under the observed actual conditions and under computed natural conditions, on the Lake of the Woods is for the four months from June to September, inclusive?

Mr. MEYER. One graph that is going into the final report, of which I have just the proof of the zinc plate here now, and the information regarding which is, I believe, in the record in answer to a question by Mr. Wyvell, shows that, considering the actual level that has prevailed during the past 23 years up to and including 1915, a level of 1,060.4 prevailed 50 per cent of the time and a level of 1,061.2 prevailed 25 per cent of the time. The computed natural level which prevailed 25 per cent of the time during the summer season is 1,058.6. Does that answer your question?

Mr. CAMPBELL. I think so.

Mr. MURRAY. Mr. Meyer, computing the extra cost relative to the storage of the extra 50,000,000,000 cubic feet, have you taken into account the construction of the protective diking along the water front of Fort Frances, and also to the north to protect the seepage from Hay Marsh Bay—that is, protective diking sufficient to prevent seepage as well as the surface flow and in order to provide sufficient drainage?

Mr. MEYER. As I said before, this figure is not an accurate computation; it is merely an estimate; and I desire to place it on that basis; but I will say that the question of drainage was carefully considered in making up this approximate estimate of the entire area back from the shore and back of the town of Fort Frances.

Mr. GARDNER. Mr. Rockwood, are you ready to go on now?

ARGUMENT OF MR. C. J. ROCKWOOD IN REPLY.

Mr. ROCKWOOD. Mr. Chairman, I am going to keep just as faithfully as I can the promise to be brief, and I shall sit down without having said some of the things I would like to say. At the same time, I think the things that I may omit are so plain and obvious and have so stood out in the discussion that has already taken place, and particularly in the statement that has just this moment been

made by Mr. Meyer, that repetition and emphasis on my part or attempt at emphasis is unnecessary.

I have taken the trouble to write a little bit, and for a few moments I want to read. There are two or three things which I want to say that are partly in the nature of repetition, but they seem to me so important that I feel as if I were justified.

First, I want to call attention again to two errors that crept into the printed brief, for which I take entire responsibility myself. One has been explained already. I thought I found different figures for the total head between the Lake of the Woods and Lake Winnipeg. I have been corrected in that, and am glad to be corrected. The other point, to which attention has not been called, is a paragraph in which I said that the steps that might be taken in pursuance of your recommendation would not only result in the additional regulation in the Winipeg River, but would make secure the degree of regulation which has already been effected. One of the engineers has said to me that, in his judgment, the regulating works, the dam at the foot of the Lake of the Woods, had not actually been operated so as to effect beneficial regulation, but regulation by nature would have been as good. So that to that extent there is nothing to be added to the figures that I suggested might be added. While the operation of the Norman Dam, as I now understand, has not added to the power below, it has improved navigation by preserving a greater stage of water and has accomplished very beneficial results, but has not improved the power.

While, as Commissioner Powell in particular suggested, it may not be strictly within the terms of the reference to consider the method of making compensation for property that may be overflowed in the United States or otherwise taken, every representative of landowners, I believe, who appeared, including two Members of Congress, has spoken on the subject with especial emphasis, and I feel constrained to add to what I have already said. The legislation should, of course, provide, in substance, exactly what these gentlemen have asked, namely, a method that will not compel litigation on the part of the landowners. I met that view, or attempted to meet it, in my brief—perhaps I did not call attention to it—with the suggestion that the commission should have the power of purchase, so that wherever agreement is possible there would be no litigation. I believe that would be found to be the best substitute for litigation. Any method other than strict procedure constituting due process of law would require the consent of the owners given when the time comes, not now, but given when the time comes, to a specific arrangement such as a lump sum, and the payment of that lump sum into the Public Treasury. It would require the specific assent of every property owner to whom it should apply, and would be, in effect, purchase and not compulsory taking. It would be purchase, to be sure, with the power of condemnation back of it, but still not condemnation; it would be purchase.

But it must be assumed that there will be some who will not bargain and some who can not bargain, such as minors, insane persons, those under disability, those that can not be found, and perhaps others. As to such, both those who can not and who will not bargain, a procedure constituting due process of law in the strict

sense of the term is in the United States indispensable. The minimum requirement of due process of law is the right to a hearing after notice before a tribunal that is in the strict legal sense disinterested and the payment of each owner's individual award to him separately, or setting it apart for him separately, in the Public Treasury. Payment for two or more tracts in a lump sum, undivided, would make no progress whatever. Such procedure would not be sustained. If any process short of due process were resorted to our courts would find a way, by injunction or otherwise, to thwart the attempt. Injunction against condemnation proceedings is a very familiar remedy in our courts.

As to the measure of damages, I am satisfied in my own mind that the provisions of the Minnesota constitution and statutes fixing the minimum price on State lands do not restrain the United States in respect to value of State lands, nor in any other respect. Cases are cited on page 36 of my brief.

As to the value that has been put upon State lands, the State officials have been absolutely fair. They have presented the case in an absolutely correct manner from the standpoint of the duties imposed upon them by statutes. Our State statutes forbid bargaining. They forbid, so far as they can, parting with title for less than the minimum price, but the minimum price of $5 per acre is not a market price or a selling price: it is a holding price. That price was fixed with reference to these identical lands long before they were surveyed and at a time when they were not worth 1 cent an acre in market value, when nobody could have thought of taking them at any price and paying taxes on them. Hundreds of thousands of acres of land, far more valuable than these, situated farther south from the boundary line and nearer the great markets—thousands, if not millions, of acres have been lost on tax titles within the last 20 or 30 years, because the owners could not pay the taxes. The taxes were usually paid, of course, while the timber stood. When the timber was cut off they had no value and went on tax sale and by other means. This is a holding price that the State put on its land. It is not a selling price at all.

Mr. MIGNAULT. It is not a market price. It is a selling price in the sense that the State will not sell unless the minimum price is paid.

Mr. ROCKWOOD. Yes; that is exactly right. I call it a holding price, a price at which the State will hold its lands and at which it would sell if it could.

Mr. MIGNAULT. I suppose your position would be that if I were, for instance, to buy so many acres at the minimum price and wanted to sell them I could not resell them at the price which I paid.

Mr. POWELL. A very curious thing is the case of money. Your own Government issued millions of greenbacks during the war. We bought them in Canada for gold at about 40 cents. No declaration of the legislature can impose a market value.

Mr. ROCKWOOD. That is exactly it.

Mr. PELLS. I do not think that Mr. Rockwood's term "holding price" is quite correct. Under the statutes of our State the State is limited to sell 100,000 acres a year. He states that the State would sell all of these lands if they could at the holding price. That is not correct. Furthermore, these lands must all be appraised before they

can be sold, and we have a very limited amount of money given us by which they can be appraised.

Mr. ROCKWOOD. I merely want to add that the State auditor himself corroborated this in his testimony at International Falls, as I understood him, when he said that he could not conceive of their being appraised at less than $5 an acre; in other words, that the statute binds the appraisers to that minimum as well as binding the officers in respect to sales.

Mr. POWELL. Is that a fact, that they can not appraise them at a price lower than $5 an acre?

Mr. PREUS. That is correct; yes.

Mr. ROCKWOOD. That is the practice, and that practice has been adopted because of the statute. The auditor, I believe, made that plain. In other words, if the appraisers are sent to appraise a particular piece of land, they will in every case bring back an appraisal of $5. They may not think it can be sold, but they will bring back an appraisal of $5, because it is the minimum. I think I am right about that.

Mr. PREUS. Yes, sir.

Mr. ROCKWOOD. Now, a word as to high water. The statute of the United States authorizing this dam, which I find in volume 32 of the Statutes at Large, part 1, on page 485, making the grant to the Koochiching Co., which grant was afterwards assigned to the Rainy River Improvement Co., says, "The Koochiching Co., its successors and assigns, is hereby authorized to construct such dam at such stage as will raise the waters of Rainy Lake to high-water mark"; and the statute requires the approval of the Secretary of War to the plans.

Under that authority the Secretary of War determined the height to which, in his judgment, Congress had authorized the dam to be built, and it was built in accordance with his determination at 497. I am not going to contend that that is conclusive. You will remember that I suggested that in my judgment it was both useless and perhaps unwise to attempt to determine debatable questions. This, I am willing to concede, may be one of the debatable questions that must be definitely settled when there is a tribunal with a definite power of settlement.

Mr. MIGNAULT. Just state what that debatable question is.

Mr. ROCKWOOD. Whether the determination of the Secretary of War that 497 is high-water mark is conclusive.

Mr. MIGNAULT. I should say no.

Mr. POWELL. Do the statutes authorize him to declare what high-water mark is?

Mr. ROCKWOOD. Not otherwise. As I said before, and this must be constantly borne in mind, the power of Congress itself is limited by the Constitution, and if a riparian owner owns to, we will say for illustration, level 495 and all above that is upland, Congress itself probably is wholly unable to deprive him of his property by saying that high-water mark is 496 or 497. In other words, high-water mark is a question of fact under such definitions as the courts have been able to make.

Mr. POWELL. You say that this matter has been before the United States Government for quite a long time? Have not they adopted some way of determining what this high-water mark is?

Mr. Rockwood. They have not, Mr. Commissioner, adopted a method that can be carried over from one case to another so as to easily apply itself. It is a question of debate and judgment every time the question arises.

Mr. Powell. In other words, it is one of these loose expressions like "what is reasonable"?

Mr. Rockwood. That is exactly analogous. Now, the methods of determining the questions might differ. They are determined by the physical investigation and then applying as sound judgment as the tribunal determining the matter is possessed of.

Mr. Powell. Judge Mitchell suggested one criterion.

Mr. Rockwood. I am coming immediately to that, Mr. Commissioner. Judge Mitchell said that the land above which an agricultural crop is ordinarily produced is upland. Now, an agricultural crop is a crop resulting from agriculture, from the cultivation of the soil. It is not the cutting of vegetation which may have a little bit of nutritive value. You will remember that the gentlemen from the experiment station, testifying at International Falls, said that the best of these samples that were brought before them had the feeding value of wheat straw, and that they ranged from that down to nothing: they did not have the power to sustain life.

Mr. Mignault. For my information, did Judge Mitchell use the term "agricultural crop"?

Mr. Rockwood. Yes; he said an ordinary agricultural crop, such as hay.

Mr. Samuelson. Such as hay?

Mr. Rockwood. Yes; that is his language, I think. I am right, am I not?

Mr. Samuelson. I have the exact quotation here, and it is in the record.

Mr. Rockwood. I have referred to it in my brief. I have at least cited the case. I have not made quotations from all the cases and possibly not from that one. I have quoted from a later case in which our own Supreme Court discussed the question in the light of the general rules of law and in the light of what Judge Mitchell had said.

Mr. Mignault. I think it was also referred to in Mr. Berkman's argument.

Mr. Rockwood. It is agricultural hay that Judge Mitchell was talking about; hay the result of agriculture, of tilling, and the care of the soil; and, as appears from the later cases, it is not the crop that is produced once in a while in cycles or years of low water, but it is the crop that is produced by agriculture in the years of high water, not in the short period of flood water, but in the years of ordinary high water.

There are two cases in which Judge Mitchell's decision has been commented upon. They are cited on page 21 of my brief, one from 112 Minnesota and one from 119 Minnesota. In the last case the quotation is not very long and I will read it. This is the last pronouncement of our State supreme court, so far as I know:

> The claim is that certain rights of accretion and reliction became attached to the lands of relators by the gradual recession of the water of the lake, of

which they can not be deprived without compensation. The rights of riparian owners in this respect were fully considered by the court in Carpenter *v.* Board of Commissioners of Hennepin County (56 Minn., 513; 58 N. W., 295)—

That is the Minnesota case which Mr. Berkman and others have quoted. [Continuing reading:]

where it was held that riparian rights below the ordinary mark of high water were subject to the superior right of the public, and that a taking thereof by the authorities for a public use, as by raising the waters of a lake for purposes of navigation or the public health, was a damage for which no recovery could be had. The same rule was followed and applied in Stenberg *v.* County of Blue Earth (112 Minn., 117; 127 N. W., 496, and other cases; 3 Notes to Minn. Cases, 1117.)

It is probably true that, by the reason of the recession of the water of the lake in years gone by, shore land has been exposed and made suitable for agricultural purposes.

That is all the land suitable for agricultural purposes in the low years.

But all thereof within the ordinary high-water mark is subject to reclamation by the public for the interests of the general welfare, and the rights of the riparian owner must yield to that right. The assessors acted upon this theory, and rightly so. Nor can the riparian owners claim the same by adverse possession, as suggested by counsel, etc.

Mr. POWELL. No; because it is an easement.

Mr. ROCKWOOD. It is not in the proper sense of the word an easement.

Mr. POWELL. Well, call it a public easement.

Mr. ROCKWOOD. We do not use that language with reference to this right.

Mr. POWELL. It is a popular use.

Mr. ROCKWOOD. Perhaps the term "popular use" describes it as well as almost any other, but it is a superior right to which the riparian owners' right is always subject.

Mr. POWELL. It is like the right of public highway.

Mr. ROCKWOOD. With this difference, it is the right which the Government itself can not surrender under our law.

Mr. POWELL. The Government can not surrender a highway either except by statute or procedure.

Mr. ROCKWOOD. Under our law there is no procedure of surrender of this public right in the natural highways. The legislature can authorize the vacation of a land highway; but it can not authorize the vacation of the great water highways. They are protected by general principles of law, the courts declaring that the State holds the title in trust for the use of the public as such. Moreover, they are protected in many other ways. They are protected by the acts admitting the State of Minnesota into the Union. There is no power except by amendment to our Constitution that can surrender the right.

Mr. MIGNAULT. As a matter of fact, it has never been surrendered.

Mr. ROCKWOOD. No. There is no suggestion that it has been surrendered.

Mr. POWELL. Let me see if I understand Judge Mitchell's decision. It is the only criterion we have had at all. This last judgment of his to my mind implies this: That if, say, 50 years ago this line of high-water mark was fixed, it came up to it, the public right would be there. Now, say that afterwards the high-water mark lowered

and, in consequence of the lowering of the level of the lake, there would be a change in vegetation and there would be a new high-water mark. Although that would be the case de facto, yet de jure the public had a right at any time to revert to the higher and older high-water mark.

Mr. Rockwood. That is exactly what was determined in this last case.

Mr. Mignault. So that if the lake dried up entirely and remained in that condition for a hundred years or more, no private individual could acquire any absolute title to any part of the bed of the former lake?

Mr. Rockwood. Riparian owners can divide up and use the land except as against the public.

Mr. Powell. If there was a change in nature and a reversion to the old order of things, the old order of things would obtain on the maxim of once a highway always a highway.

Mr. Rockwood. That is the rule under our law, and I think there has never been even a dictum to the contrary.

Mr. Powell. To apply that to this particular case, if it could be shown, by indication on rocks or otherwise, that at some period of time the water had attained a certain level, exceeding a high-water mark within Judge Mitchell's dictum, that and not the level at the present time would be the determining element?

Mr. Rockwood. That is exactly true.

Mr. Powell. You can never get away from that.

Mr. Rockwood. That is true.

Mr. Powell. That is your contention?

Mr. Rockwood. That is exactly correct, and I am entirely satisfied that that is the law.

Mr. Powell. And if it is conclusively shown that the high-water mark, as defined by Judge Mitchell, existed at some former period at 2 feet higher than it is at the present time, that determines the case?

Mr. Rockwood. And that is still high-water mark. We must always remember that under our law high-water mark is not the extreme flood mark to which the water has once gone, but it is a mark that is sometimes quite difficult of ascertainment and one that requires application of sound judgment, as in determining what is reasonable and what is not.

Mr. Powell. I can understand why Judge Mitchell adopted an agricultural view of the case, because in the inception of things grants were almost entirely of agricultural rights or forestry interests or hunting interests. If that be the case, the presumption would be that the Crown granted down as far as could be available to the party for agricultural purposes. But, after all, it is an arbitrary criterion, is it not?

Mr. Rockwood. Somewhat so, necessarily.

Mr. Powell. It would not apply to the law with respect to tidal waters, because two or three dashes of salt water will kill the agricultural vegetation. But that is not the line of the grant; the grant is the ordinary high water—the mean between the high and low.

Mr. Lockwood. These definitions have been devised for purposes of fresh water, where the fluctuations are from variation in rainfall and, to some extent, variations in climate, perhaps, but where this

year is not like last year in the sense in which it is in the flow of the tide.

Mr. MIGNAULT. I would like to know if you are taking the ground that where there is a definite high mark shown on rocks, for instance, such as lichens, that that would indicate what you consider as the point at which high water would have stood?

Mr. ROCKWOOD. No; I would not go to that extent.

Mr. MIGNAULT. I would like to know exactly how far you would go.

Mr. ROCKWOOD. As I understand it, the lichens themselves are, generally speaking, somewhat above the water. Your engineers will correct me if I am wrong in this. There is a line where the dashing of the water is sufficient to destroy the lichens. In any case, our courts take the view that every fact must be taken into consideration. The lichens would be one. They would not be ignored by any means; they would be taken into consideration. The judge being possessed of all facts with respect to all the years which the investigation covered would finally draw the conclusion which best satisfied his judgment and reason as to what is the point above which agriculture—the tilling of the soil, the production of cultivated grasses and crops—is possible in the years of high water, not flood periods, but in the years of high water.

Mr. MIGNAULT. How would you apply that to Rainy Lake in particular?

Mr. ROCKWOOD. Mr. Commissioner, I am obliged to confess my absolute inability to name a line and say that others of equal or greater ability and knowledge would not put the line a little higher or a little lower.

Mr. MIGNAULT. What do you say as to the claim made here that the Government meander lines indicate the line of ordinary high water?

Mr. ROCKWOOD. That falls of its own weight, because Mr. Berg testified that the meander corners vary from 490 to 494. Mr. Samuelson yesterday thought he said 493, but he said 494. His testimony is on page 43 of the hearing at International Falls. High-water mark is not 4 feet wide. Furthermore, those surveys in that swampy country were made in winter; they were made on the ice and at a time when the water was low. Under the instructions they went where the water was, and that is how it happened to be in the low-water stage from 490 to 494. That is the stage in successive years at which they happened to find the water when they were there. Beyond that there is a possibility of their not having set the stake at the very edge of the water. In those flat swamps 30 feet or 40 feet does not make much difference in levels. They were instructed to go to the line of vegetation. The line of vegetation is nowhere spoken of in any decision as the line of high-water mark. It is the line of agricultural vegetation, not the line of vegetation, but of cultivated vegetation that determines the upland and distinguishes it from that which is below high-water mark.

Mr. POWELL. Do you assent to that, Mr. Samuelson?

Mr. SAMUELSON. I do not.

Mr. LOCKWOOD. I am using the language of the court.

Mr. MIGNAULT. It strikes me as very remarkable, Mr. Rockwood, that no other test than that has been suggested. I would imagine

that there would be other tests for determining where high water stood as an ordinary stage of a river or lake.

Mr. ROCKWOOD. Our courts have not found them. There may be other tests, but if there are they have not found them.

Mr. MIGNAULT. That is the only test that has been given by your courts?

Mr. ROCKWOOD. I have searched in vain to find any decisions that are any more definite than these Minnesota decisions, and I have given you the very language of those decisions. I know from experience that in every case in which the question is investigated there is difference of opinion, and the conclusion of the judge or the conclusion of the jury is treated as a question of fact.

Mr. MIGNAULT. It is a question of fact.

Mr. ROCKWOOD. It is a question of fact and a question of judgment.

Mr. MIGNAULT. The test adopted by Judge Mitchell would not be applicable to a lake entirely surrounded by forest, nor to a lake entirely surrounded by sandy or rocky shores.

Mr. ROCKWOOD. It would be more difficult of application.

Mr. MIGNAULT. Well, it would be impossible. It presupposes that there is agricultural soil on the waters of the lake.

Mr. ROCKWOOD. He means soil susceptible of cultivation.

Mr. MIGNAULT. But take pure rock that surrounds a lake. There is no vegetation there except the peculiar form of vegetation that grows on rocks, such as lichens.

Mr. ROCKWOOD. That is very true. It would give no weight at all.

Mr. POWELL. Is that standard accepted as absolutely the law now in Minnesota?

Mr. ROCKWOOD. Yes.

Mr. POWELL. There is no question about it?

Mr. ROCKWOOD. There is no question about it. Of course, those decisions were made and the language that they contain was used with reference to the facts that were then before the court. In another case such as a bare rock, the courts might look at the question in an analogous way and arrive at the best results they could.

Mr. MIGNAULT. It would strike me as extremely unlikely that any court would fix upon an arbitrary test as being the test of high water.

Mr. ROCKWOOD. You are perfectly right, Mr. Commissioner.

Mr. MIGNAULT. It may have arrived at that test in view of the peculiar circumstances of the case that was before it.

Mr. ROCKWOOD. You are perfectly right that in other circumstances the court would take into consideration the actual circumstances.

Mr. MIGNAULT. That is to say, it is always a question of fact to be proved by testimony or visible signs showing where the water has stood.

Mr. ROCKWOOD. That is true.

Mr. SAMUELSON. Mr. Mignault, I have a typewritten copy of the definition as it is laid down in Fifty-sixth Minnesota by Judge Mitchell. The court in its opinion uses this language:

"High-water mark" as a line between the public and riparian owners on navigable waters, where there is no ebb and flow of the tide, is to be determined by examining the bed and banks and ascertaining where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed a character distinct from that of the banks, in respect to vegetation as well as respects the nature of the soil itself.

"High-water mark" means what its language imports—a watermark. It is coordinate with the limit of the bed of the water, and that only is to be considered the bed which the water occupies sufficiently long and continuously to wrest it from vegetation and destroy its value for agricultural purposes. * * * The bed does not include lowlands, which, although subject to frequent overflow, are valuable as meadows and pastures, and the State has no right, even in aid of navigation, to raise water by artificial means so as to injure and destroy such lands without first making compensation.

That is the exact language of Judge Mitchell as contained in that case.

Mr. MIGNAULT. Yes; it strikes me that it is a little more elastic than I thought.

Mr. SAMUELSON. And a little more elastic than indicated by my friend's argument.

Mr. ROCKWOOD. I quoted the later decision to show that agriculture in low-water years does not deprive the public of its superior right.

Mr. Chairman, I wish simply to repeat that this is one of those elastic questions which it is utterly impossible to determine now in a conclusive way. The figures that are used by the engineers in their estimates, as I understand, are the figures claimed by the State and by the property owners, and I think that they go below the legal high-water mark. If I am wrong, I want to be corrected. I do not pretend to know. That is simply my judgment. I understand, also, that they took as to values the figures placed on the lands by the owners—that is, they went to the outside in making their computations.

What more I intended to say has been said more effectively than I could possibly say it, in the main, by Mr. Meyer, and that is this: That the improvement of this waterway from its source to its mouth, to the Winnipeg River, at least from the point where the waters begin to gather, is one problem, and the splitting of the problem at any point is not constructive but destructive, not conservation, but abandonment and destruction.

I did not realize fully what this 50,000,000,000 of additional storage meant in value. I knew it was great. I knew the word enormous was not too great to apply to it, but it is greater than I had supposed. Now, stop and think a moment of the figures that were used. Eight per cent as a capitalization. That is entirely proper and very conservative, probably, from the standpoint of the individual who is going to put his money in and take a chance of getting it out. He must have a margin. It is certainly proper from the standpoint of the man who must finance a project by getting aid, by selling bonds, and getting others to put in their funds, others who do not know the project as well as the promoter may. But 8 per cent, as I said the other day, from the standpoint of the community does not approach the value. It should be capitalized at 4 per cent and then it will not approach the value, because the value of a project of this kind is realized only in the lesser degree by those who put their money into it. It is realized in the main by those who do not put their money into it, but by those who are given the means of profitable industry through it. Value to the community is enormously above and beyond any figure that has been used here.

Mr. Meyer got up to the figure, as I remember now, of a million and a quarter or a million and a half for the powers that are now developed and immediately to be developed, including about half of

the power between the two lower lakes. Taking all the power between the two lower lakes he got up above two million and a half. As an asset to the community that should be multiplied by two and then it will be only a beginning toward the real value to the community.

I am going to ask pardon for saying a word in behalf of the industries at International Falls and Fort Frances. I had intended to keep away from that subject, and certainly not to ask favors; but I am going to state a few facts. Arrangements for the development of this power were made in 1905. The contract with the Government at Toronto was made when there was no railroad in sight and it was not known whether there would be a railroad there or not. I mean a railroad from the south side. There was utterly no possibility of shipping at that time by the Canadian roads, nor of marketing a single pound of product by the Canadian roads for various reasons. It was pioneering in the strictest sense of the term, going in and blazing the way and dragging railroads in to carry materials in and bring materials out, and it took three years to get the first railroad through from the south by which products could be shipped. During those three years a very large sum of money was expended on faith. The amount run up to half or three quarters of a million dollars. It was literally upon faith that when an industry was established and was definitely in sight a railroad would come. It got there in 1907, just a few days short of three years after the contract for building the dam was let and work commenced. That contract, because manufacturing at that time was recognized to be impossible on the Fort Frances side, did not provide for it. It provided for retaining a certain amount of power that should be offered on the market unless the company itself should find means of using it. That was a contract made with the Province of Ontario and approved by legislation of the Dominion. The very first thing that was done, and done at the request, I think, of the people of Fort Frances, was to request the Canadian Parliament, in the exercise of their great power which does not exist in the legislature on this side of the boundary, to amend the contract. The contract was amended and greater burdens imposed upon the company by legislative action. We were helpless. We went ahead. The contract, among other things, it is true, suggested this revetment wall. I do not remember exactly what the language was, but for the present I concede that it required the revetment wall. The task of raising money for that great project had to go on and the securities had to be sold. Mr. Backus, who stands here as the representative, did not have the cash in his pocket to do it, and the securities had to be sold. While it is neither here nor there in any legal sense, the fact is that those securities were very largely sold across the water, and some of the men who purchased them are now fighting the battles of their country in France. They are among those whose interests you are considering.

After the plant was installed and manufacturing had begun on the Minnesota side, the people of Fort Francis very naturally wanted some manufacturing on their side. The plant on the Minnesota side had a capacity of about 210 tons of paper a day. They wanted something approximating the same capacity on the other side. There was not power enough for the same capacity, but by means that I will not criticize at all they put on the pressure to get an industry on their side that should match the one on the Minnesota

side, and they brought about the construction of this plant on the Canadian side with a capacity of say 125 or 130 tons per day; that plant having two of the largest machines that at that time had ever been manufactured and having a capacity of 130 or 140 tons per day. I am not trying to be precise in these figures.

Mr. TAWNEY. That makes a total capacity of how many tons per day?

Mr. ROCKWOOD. Three hundred and fifty tons per day. It is now turning out that paper, about 210 or 220 tons on the one side and the remainder on the other. There is a demand for it, and it is being manufactured and sold. Now, gentlemen of the commission, what position did that put us in?

Mr. POWELL. Do they manufacture that quantity now?

Mr. ROCKWOOD. Yes; six days in the week.

Mr. POWELL. That takes over 2,000,000 feet of lumber per week, does it not?

Mr. ROCKWOOD. A cord of wood manufactures about 1,500 pounds of paper; so there are used about 450 cords of wood a day. I am not just precise in that, but that is approximately correct.

Mr. POWELL. An ordinary allowance is about 1,200 feet for a ton.

Mr. ROCKWOOD. I had not figured out quite so far as that. Now, the plant was built on the best engineering advice that could be procured; at least, the owners thought so. It was designed for the capacity of the stream, including the 500 bench mark. Not that the 500 bench mark was authorized—I do not mean that—only 497 was authorized, but it was built with the structural strength of the 500 so that the masonry comes to 497 with all appliances for putting in flashboards and increasing the water level to 500. All the expenditures were incurred for the full capacity up to 500 and with the full knowledge and approval of both Governments.

There was not as much water as the engineers thought there was going to be, and in those very dry years, 1910 and 1911, it was with great difficulty that the mill on one side was kept going. The two mills have now pushed the paper manufacturing capacity and the investment beyond the capacity of the stream, especially with 497 as the maximum head. The money has been put in and put in under pressure without the water to propel the machinery, but with the expectation every minute that additional power was obtainable and was going to be obtained by the proper means.

Last October, anticipating that the water might go down, as it has always gone down to a very low point in winter, the company had to go out and buy pulp. It had to go down somewhere in eastern Ontario as there is none in western Ontario. It did make a contract for a great many thousand tons. The water for some reason has not gone down this winter. It has remained up to a very good stage. It is now about 494 or 495, with 2 feet of the crest of the dam.

Mr. MAGRATH. What proportion do you get in the two countries for your two mills?

Mr. ROCKWOOD. Of wood?

Mr. MAGRATH. You say you went down into Ontario to buy pulp wood?

Mr. ROCKWOOD. Ordinarily we grind our own.

Mr. MAGRATH. You bought the pulp down there?

Mr. ROCKWOOD. We bought the ground wood and arranged to ship it in.

Mr. MAGRATH. Can you state offhand what proportion of the wood comes from each of the two countries for the mills that you are operating?

Mr. ROCKWOOD. I do not know. Formerly a very large portion of the wood for the Minnesota mill came from the Canadian side. The settlers found a market and a large quantity was obtained on the Canadian side. I have never inquired how it was divided since the second mill has been started.

When it turned out that the water was holding up and there was going to be enough to go through the winter, it was unnecessary to ship all of that pulp. Three thousand five hundred tons were shipped in, and, of course, at great loss in comparison with the cost of manufacture if we had the power.

Mr. MIGNAULT. What is the object of all these details, Mr. Rockwood?

Mr. ROCKWOOD. It is to show the equity, the necessity, of doing what has been planed and carrying this development of power to the 500 mark. I may be wrong about it, but I think that I am putting in facts in 10 or 15 minutes—it may be longer than I am conscious of—that are of an importance beyond facts that have consumed your time, and properly so, for days heretofore. If I am mistaken, I apologize. I am very nearly through.

Mr. MIGNAULT. I was just thinking that you went into this matter in your opening statement, and now you are making your argument in reply.

Mr. ROCKWOOD. I am going into some of these details because in certain directions an apparent opposition has appeared that I was not conscious of.

Mr. MIGNAULT. No body has stated that your industry is not an important one.

Mr. ROCKWOOD. No; that is perfectly true; but not every one realizes the vital necessity to that industry of these other 3 feet. I am trying to make that so plain that it can not be forgotten for a single moment. And in connection with figures that Mr. Meyer has given this morning, not different from what he gave before but removing any possible misunderstanding as to what he had said before, I think the facts that I have now been calling attention to are of the highest importance and of the highest justice. I want to repeat again, which is also unnecessary, that I do not stand here and shall never stand here, and I hope nowhere else, to ask that any man's property be taken to contribute to this without means of compensating him; not giving him a fortune out of it, but compensating him so he will be in as good a position as he was before.

Mr. MIGNAULT. Will you just attach yourself to this point, which to my mind you might well be heard on: With respect to the fifty billion of excess storage over the one hundred billion now available, what is to prevent this storage being obtained on the lakes above Rainy Lake without raising the level of Rainy Lake above 497?

Mr. ROCKWOOD. The engineers have answer that by saying that there is no other known place to find it at any expense that would be reasonable or justified.

Mr. MIGNAULT. There is no other means, according to you, to obtain 150,000,000,000 feet of storage unless the storage on Rainy Lake is raised to 500?

Mr. ROCKWOOD. Yes; that will furnish 30,000,000,000 additional, and we are going into those small lakes—there is a series of them above Namakan—to try to find the other twenty. The engineers made a rough estimate of the total cost of $350,000 as against an actual value ranging from a million to two and a half million dollars. Because we in good faith put a lot of money in in advance, it has to us a value beyond any figure that Mr. Meyer used.

The only real problem here, if there is any, is narrowed down to Fort Frances. As I understand it, the only semblance of contest beyond the question of estimating land damages is narrowed down to the protection of Fort Frances.

Mr. MIGNAULT. That is true; outside of Fort Frances, you can indemnify, but Fort Frances seems to be seriously involved if you raise the level of Rainy Lake to 500.

Mr. ROCKWOOD. I should be willing to concede that Fort Frances is seriously scared, but I think not seriously involved. Except a few feet at the margin, Fort Frances will be above a 500 level, and they will have 30 feet of fall at the west end for drainage and sewerage.

Mr. POWELL. That strikes me as being a little misleading.

Mr. ROCKWOOD. I want to be exactly accurate.

Mr. POWELL. You see, the 500-foot level makes an inroad on the uplands in a certain portion of the town. I think the fall of the water there is only about 20 feet.

Mr. ROCKWOOD. From 30 to 33 or 34 feet, and with the 3 feet additional it would be increased, so that when I say 30 I am well within the limit. Taking 500 as the upper surface, the surface of the water below the falls seldom rises above 465 or 466. It is usually lower than that. It does from the floods from the Little Fork once in a great while get up to 475, but there is always 25 feet or more, and usually 35 feet, of fall.

Mr. POWELL. It is the high level below that we must consider.

Mr. ROCKWOOD. That is true; but 25 feet is abundant.

Mr. POWELL. That is plenty; there is no question about that.

Mr. ROCKWOOD. Your engineers have made it plain and emphatic that they have undertaken to consider Fort Frances as well as everything else involved, and that a protective wall—and that wall would have been built long ago if we had not been forced to put money into manufacturing on that side—a protective wall, a system of drains and sewers, as your engineers will tell you, will make the town absolutely safe.

Another thing: The raising of that water will leave there on top of the dam 3 feet of flashboards, which can be knocked off with a hammer in five minutes, and will increase the discharge capacity of the dam by a weir 3 feet deep and about 700 feet long, as I remember, around the curve of the dam. So that if these protective works are put in and that additional discharge capacity in that way created Fort Frances will be vastly safer when the big flood comes, if it ever does come, than it is now.

Now, the works are there to 497, but the full protective works for 500 are not there, and we have not been requested to put them in with reference to 500. If they are put in with reference to 500 it

enormously increases that discharge capacity and enormously lessens the danger from a great flood, if it ever comes.

With regard to Pithers Point, the Government itself required us to build this dam, and at the time the Government owned Pithers Point. The Government required us to do all in the nature of flooding Pithers Point that we have done. It required it under that contract. Suppose some trees have been killed. We were required to kill them. We had no choice about it.

Mr. MAGRATH. Was there nothing in your contract to protect the Canadian shore at all, Mr. Rockwood?

Mr. ROCKWOOD. Not to protect public property. It is provided that we shall not be exempt from a liability for injuring private property, but so far as public property is concerned the grant carried not only the power but the duty to put water up to the 497 mark and we have not put it above. The same applies to the suggestions that have been made to the public property above, the Indian grounds, etc.

Mr. MURRAY. Is it not a fact that Pithers Point and the property to the north and east was the property of the Indian Department; that Pithers Point has been obtained by the town by an agreement with the Indian Department of the Government, and that this contract of 1905 to build the dam with certain flooding rights, subject to compensation, has been made with the Government of the Province of Ontario?

Mr. POWELL. Your point is that it does not touch that point at all?

Mr. MURRAY. Yes, sir. Was it not a part of the contract of 1904 and 1905—because there were two of them with the Ontario government—that half of the power produced by this dam should be used for manufacturing purposes on the Ontario side? As a matter of fact, the contract is in as an exhibit and the commission can refer to it.

Mr. ROCKWOOD. With reference to the first point: If the legislative department of Canada, the Province and the Dominion, can amend our contract and subject our private rights to that legislation against our will, I apprehend that there can be no question of the power of the same Governments to subject their public servants to their own legislation, including the Indian Department and all other departments. They are organized under that legislative power and are, of course, subject to it.

Mr. POWELL. Your contract was with the Ontario government?

Mr. ROCKWOOD. It was with both. Your honors will remember that the Ontario government was treated as the proprietor of the water power and of the lands; the Dominion Government as the trustee or guardian of the public right to navigation.

Mr. POWELL. And of the Indians.

Mr. ROCKWOOD. And of the Indians. Both governments legislated on the subject.

You will not find that the original contract required the equal division of power and it did not require us to use a pound of power on the other side, but simply to retain a certain quantity, I think, 4,000 horsepower, so that it should be available when others might come along and want to buy it, unless we should first find use for it ourselves. So there was never any contract for the erection of manufacturing industries on the Canadian side until long after the mill

on the American side was in operation, and the Fort Francis people asked that the additional burden should be put on us.

Mr. TAWNEY. Mr. Rockwood, there is one matter that I want to call your attention to before you close. It applies to everybody who has appeared here. You all agree as to how the damages shall be paid, or how the lands that are submerged and injuriously affected shall be paid for, but none of you has yet suggested from whose pocket the payment is to be made, either in the initial payment or ultimately.

Mr. ROCKWOOD. Practically, Mr. Commissioner, in the initial payment on our side, in order to satisfy due process of law, the Government will have to pledge its credit. Somebody will have to put up the money or the Government will have to pledge its credit as a practical proposition. As to how, if at all, either Government should be reimbursed, that has not been suggested. We have chipped in enormously for the improvement of this waterway. We have made an investment that is producing results down to Lake Winnipeg, and all the others are actually getting the benefit, including navigation for the whole length of the waterway. We are carrying a big burden to do it. I am not going to press the matter and say that we shall be exempt. I have treated that as one of the questions which could not be decided now and of which discussion would at the best be merely suggestive and preliminary.

Mr. TAWNEY. Do you not think under this reference it would be necessary for the commission to make some recommendation as to the mode of payment?

Mr. ROCKWOOD. I think it would be necessary for the commission to recommend enough to constitute due process of law and acquire the property, and beyond that to request the powers to consider and make a just determination in the future.

Mr. MAGRATH. You spoke of your contribution. How much did your dam cost at International Falls, as well as your dam at Kettle Falls?

Mr. ROCKWOOD. I have not the figures in my mind.

Mr. BACKUS. About a million and a half.

Mr. ROCKWOOD. Now, gentlemen of the commission, I wish to repeat again that as I look upon this it is not only in the development sense, but in the practical sense, one proposition from beginning to end, from the farthest reservoir that will be utilized up the stream down to Lake Winnipeg, and I am satisfied that splitting destroys. I am not going to discuss that, but I am satisfied that splitting destroys. It must practically be treated and determined as a single proposition.

Now, for myself and for my clients, for those with whom I am associated who have not spoken, I join most heartily and sincerely in all that has been said—and if I could add to it I would—in commendation of the patience and industry that the members of the commission have given to the consideration of this question. It is a great question. It is great, as I have tried several times to say, beyond what immediately appears, and it is vastly greater because of the fact that it is another attempt to add to the contributions that this commission has already made toward accomplishing the purposes of the treaty and not only ending disputes but preventing disputes between the two countries. I could not if I tried find the words that would emphasize these thoughts as I entertain and feel them, and, personally,

I must express my own gratitude for the very courteous consideration that has been shown to me at all stages of these proceedings.

STATEMENT OF MR. JOHN E. SAMUELSON.

Mr. SAMUELSON. Mr. Chairman and members of the commission, the expressions that have been made by Mr. Rockwood just now and the expressions that have been made during this week by other parties who are interested in this proceeding, as well as some of the expressions contained in some of the language used by the commissioners, brings very forcibly to my mind this one fact: That the power conferred upon this commission at the present time is insufficient for the commission to close this matter now. The thing that has forced itself upon my mind and concerning which I ask the approval of the other parties who are interested is that as practically all of the parties that are affected by the raising of the waters of the Lake of the Woods, Rainy Lake, and Rainy River are now present, we address a communication to the two Governments, both of whose legislative bodies are now in session, and ask that the power of this commission be extended so as not only to determine, but to adjust and settle, this entire controversy, and that that be done before this commission makes a finding one way or the other upon the questions that have been presented to it.

I feel, as I believe everyone present must feel, that the commission has fully gone into this question; that they are broad-minded men, and have a large view of the present situation, and that the interest of all parties could be best subserved by addressing a communication to the separate Governments asking that the power of this commission be extended at this time so that they might themselves determine what the proper height of the water should be and the proper method of providing for the compensation that should be paid to the various parties for the property that is taken.

Mr. TAWNEY. I suppose you do not really mean to request any extension of power, because the commission would have the power now under the treaty if the whole matter were referred to us under another article—article 10.

Mr. MIGNAULT. And in sufficiently comprehensive terms to enable us to do what you ask us to do.

Mr. TAWNEY. The power exists; it is only a matter of whether or not they would invoke it for that particular purpose. If it is to be invoked for that purpose it is for the two Governments to indicate the limitation upon the exercise of the power, just as the treaty said.

Mr. SAMUELSON. I know of no better time to have the expression of the interests presented to the two Governments than now, and simply remove the limitation that has already been placed upon the commission so it might adjust these matters at the earliest possible moment. Two Congressmen have appeared here. The State of Minnesota has been represented, as have also the settlers and the Canadian interests. I think that without question all the interested parties would ask that a speedy determination of this matter may be had, and I know of no way except to get authority from the two Governments at this time to simply wipe out the limitation that is now placed upon the commission and give it full authority to adjust and close out this entire matter. I would like to have the expression of some of

the other interests here, if that be possible, and to have some one possibly draft a resolution to the two Governments to bring the matter properly before them in order that that limitation which is now placed upon the commission may be removed. I think everyone has absolutely full faith in the integrity and the ability and the honesty of this commission to do full justice to all interests that are now before it. I now express my personal feeling in that respect, and I believe everyone present feels the same way.

Mr. TAWNEY. Mr. Samuelson, if it should be deemed desirable and practicable to follow out your suggestions it could be done in a very simple way. The two Governments have their legal representatives in this particular investigation, whose appearance is a matter of record and who have participated in and are familiar with the whole situation. If the private interests that are involved and represented here should present to them a request that they go to their respective Governments with the suggestion mentioned, the desired result might be accomplished in that way. On the other hand, if you go direct to the two Governments, independent of their legal representatives, there is no telling how soon it would be acted upon, because it would then involve diplomatic negotiations that would probably extend over a long period of time. The practical and simple way to carry out the suggestion, if it is desired on both sides of the line to do it, would be to make this representation to the legal representatives of the two Federal Governments and let them take it up with the proper officials.

Mr. SAMUELSON. I have not given any great consideration to the methods to be employed, but I know that we are all here, and the representatives of both Governments are here, and I should think that under the treaty as it stands it would be a very simply matter to bring it to the attention of the two Governments by their representatives, and it is a matter that ought to be done in the interest of everybody concerned.

Mr. GARDNER. I think it is entirely proper for the interests represented in this problem to confer among themselves during the recess and reach some conclusion regarding the matter.

Mr. TAWNEY. I want to add this to what I have said: The commission can not take the initiative, because the two Governments have directed us to make the investigation and report under article 9 upon the reference which they have submitted to us. The initiative would have to be taken by the representatives of the various interests of both countries.

(Thereupon, at 12.30 o'clock p. m., a recess was taken until 2 o'clock p. m.)

AFTER RECESS.

The commission reconvened at the expiration of the recess, 2 o'clock p. m.

Mr. BERKMAN. Mr. Chairman, I have a short statement to make. I conferred with Congressman Steenerson with regard to the proposition of a new reference being made to this commission before it submits a report on the present one, and regarding the proposition submitted by Mr. Samuelson I would say that, so far as the riparian interests on the Lake of the Woods are concerned, we do not concur in the methods suggested by him. We insist that the commission make its report under the present reference, and we respectfully ask that in the report to the two Governments recommendation be made

for final disposition such as will give to the riparian owners relief in as expeditious a manner as can be devised.

Mr. GARDNER. Mr. Keefer, are you ready to go on now?

Mr. HILTON. Could a statement I wish to make, Mr. Chairman, follow Mr. Keefer's argument, or should I make it now?

Mr. GARDNER. You had better put it in now.

STATEMENT OF MR. CLIFFORD L. HILTON.

Mr. HILTON. There are two points that I wish to refer to for fear there might be an erroneous impression had from certain statements made by Mr. Rockwood relative to the position and intention of the State of Minnesota.

We do not base our claim as to values solely upon the fact that under the constitution and laws of the State the minimum price is fixed at $5 per acre. We advanced that proposition, it is true, but we claim that by the evidence in this case, which the commission will consider in reaching a determination, it is proven conclusively that the values that we are claiming are correct.

In the first place, there is the report of these three appraisers, sworn officials, and the presumption is that they did their duty in fixing the values. We have filed with the commission Minnesota Exhibit C, which shows actual sales of lands in these localities within the past three or four years for those prices, and a number of instances are given where sales were made of lands in the identical sections that are here involved.

In addition to that, the evidence shows that there is not one word of testimony to the effect that the lands are not worth the prices we claim. In fact, Mr. Ralph, a witness called on behalf of the power company, testified that lands above the 496 level were worth more than $5 an acre.

Again, as regards high-water mark being coterminous with the meander line, I wish to call the attention of the commission to the fact that there is not one bit of testimony in the record showing what is claimed by the power interests as high-water mark. We claim that in this particular instance along the shores of Rainy Lake and Rainy River and the tributaries that in truth and in fact the high-water mark was at the meander line. That is substantiated by the testimony of Mr. Berg, by the testimony of Mr. Ogaard, the surveyor who made part of the Government surveys himself, and also by the testimony of the various settlers who said that 20 or 30 years ago when they came upon their land the water was at a certain stage and that it had uniformly kept at that same stage until after the construction and maintenance of the dam, and that then the water came up to a height of 5 or 6 feet on their land above that particular meander line.

During the entire discussion here this week the so-called Minnetonka case has been referred to time and time again, excerpts have been read from that decision and numerous inquiries have been made by members of the commission. Fortunately, I have the 56th Minnesota here. I think it would be of advantage to the commission in their deliberations if I should read that case in its entirety. With the permission of the commission I would like to have that decision incorporated in the record so that when you find any reference to the

Minnetonka case you will have the full text before you. It appears that Judge Mitchell, as was his custom, went into the matter fully from every possible angle.

(The decision of Judge Mitchell, appearing in 56 Minnesota, pp. 517–523, is as follows:)

MITCHELL, J.: Lake Minnetonka is a large, navigable body of water, situated mainly, but not wholly, in Hennepin County. The shores of the lake are in some places somewhat steep and abrupt and in other places low and flat, and bounded by large tracts of lowland only slightly elevated above the ordinary level of the water of the lake. These lands form no part of the bed of the lake, but are more or less subject to periodical overflow at certain seasons of the year—during some years in times of high water caused by rains or melting snows—but they are sufficiently dry when the water subsides to be susceptible of valuable use as pastures and meadows. The height of the water in the lake varies in different years and at different seasons of the same year, according as the year or season of the year is wet or dry, the difference between extreme high water and extreme low water, according to observations taken during a series of years, being something like 6 feet; extreme high water being 223.65 and extreme low water being 217.84, measured from an arbitrary base line. These changes in the height of the water are irregular, without fixed quantity or time, except that they occur periodically, according as the year or the season of the year is wet or dry. The rises of the water to a sufficient height to overflow in whole or in part these lowlands are not infrequent and are liable to occur any year, usually in the spring; but the water generally subsides later in the season so as to render the lands capable of use as meadows and pastures. The outlet of the lake is Minnehaha Creek, the real point of outlet being about 4 miles below the main body of the lake. About a mile below this point there was a mill and milldam, which had been maintained for over 20 years. The object of this dam was, apparently, to enable the owners of the mill to use the lake as a mill pond in which to store the waters of the lake at certain seasons of the year and draw them off at others, as required for the use of the mill.

In 1891 the legislature passed an act (Sp. Laws, 1891, ch. 381) which, after reciting that it was necessary "for the improvement of navigation, preservation of public health, and for public advantage, benefit, and use," that the waters of the lake should be maintained at a uniform height, sufficient to secure these purposes, authorized the board of county commissioners of Hennepin County to establish and maintain a uniform height of the water, "not to be above extreme high-water mark of the waters of said lake." In order to carry out the purposes of the act the board was authorized to acquire, by gift, purchase, or condemnation, the dam already referred to, together with all the rights and easements connected with or appurtenant to the same, and the land on which the dam was situated, and such other lands adjacent thereto as might be necessary to enable the board to maintain said waters at the height so established. As will be seen, the act authorizes the acquisition only of lands on which the milldam is situated and lands or rights inland adjacent thereto, and not of riparian lands or rights in riparian lands on the lake; and, of course, it makes no provision for the payment of compensation for any such riparian lands or riparian rights.

The act provides for the assessment, by appraisers appointed by the court, upon such lands in Hennepin County as they deem specially benefited by the improvement, such sums as they shall deem a just proportion of the total cost of the purchase or condemnation. Under this act the board of county commissioners establish the "uniform height" at which the waters of the lake should be maintained at 220.91, measured from the base line referred to.

This is considerably above average natural low water, and below natural extreme high water in wet seasons.

Of course the effect of maintaining the water at the "uniform height" thus established would be to make such height permanent low water, except, possibly, in very dry times, when the water might altogether cease to run over the dam and evaporation would reduce it somewhat below that level.

The evidence shows that the effect of uniformly maintaining the water of the lake at the height thus established would be to overflow permanently some of these low riparian lands, or at least to render them so wet as to destroy or seriously impair the value for pasture or meadow, which they would have if the waters of the lake were left at their natural level.

The board of county commissioners having acquired the milldam and adjacent lands at a cost of some $12,000, caused further proceedings under the act

to be had by which assessments for benefits were made against the lands deemed benefited. Upon application to the court an order was made, against the objections of the appellants, confirming the assessments against their lands, and from this order they appealed.

Various objections to these assessments were interposed, but, as we view the case, it is only necessary to consider one. To support an assessment for benefits against the lands of appellants it must appear that they will receive the benefits for which they are asked to pay. In other words, if for any cause the right to maintain the water at the height fixed by commissioners can not be secured under the act the assessments are invalid, for this is the very benefit for which appellants are taxed.

As no provision is made for compensation to riparian owners on the lake, it follows that if they are entitled to compensation—in other words, if what is proposed to be done constitutes a taking of their property—the assessments are void.

The respondents claim the right to maintain the water to the height established without paying compensation to these riparian owners on two grounds—first, that the State has the right, in aid of navigation, to raise and permanently maintain navigable waters up to ordinary high-water mark without making compensation to riparian owners; second, that the owners of the milldam on Minnehaha Creek had acquired a prescriptive right, as against riparian owners, to raise and maintain the water of the lake at a height as great as that established by the county commissioners under this act. The second proposition may be disposed of very briefly. In the first place, the court below declined to pass upon it, but based its decision exclusively on the first ground. Again, the evidence was, at least, not such as to require a finding that any such prescriptive right had been acquired. It perhaps did appear that the milldam had been continuously maintained for over 20 years at a height sufficient to maintain water at the uniform height established by the commissioners. But merely maintaining a dam on one's own land, without thereby raising the water, will not create a prescriptive right upon the lands of another. It is only the uninterrupted flowing of such lands for the statutory period that will create such a right. The evidence tends to show some further considerable intervals during which the water was not maintained at any such height as is now proposed, and which would, therefore, interrupt the prescription. The evidence also tends to show that when the mill was in operation the water was drawn down by means of gates for power to turn machinery, and hence, of necessity, the height of the water must have been much of the time below that "uniform height" which it is now proposed to constantly maintain under this act.

It remains, then, to consider the first ground, viz, the right of the State, in aid of navigation, to raise and permanently maintain the water up to ordinary high-water mark without making any compensation to riparian owners. While the title of a riparian owner on navigable or public waters extends to ordinary low-water mark, yet it is unquestionably true that his title is not absolute, except to ordinary high-water mark. As to the intervening space, the title of the riparian owner is qualified or limited by the public right. The State may not only use it for purposes connected with navigation without compensation, but may protect it from any use of it, even by the owner of the land, that would interfere with navigation. It may be conceded, as claimed by respondent, that "within the banks and below high-water mark the public right is supreme, and that damages to riparian proprietors are damnum absque injuria," but the question is, What is "high-water mark," as the line between the riparian owner and the public, and below which his title is thus qualified by the public right? It seems to us that it is right here where both the trial court and counsel have fallen into error. It seems to have been assumed that "high-water mark" means the extreme line which the water reaches (even outside its natural channel or bed) in times of high water, caused by rains or melting snows, which are not unusual or extraordinary, but occur annually, or at least frequently during the wet season. The consequences of any such rule, if applied to our navigable rivers and inland lakes, would be very startling. Take, for example, the Mississippi River. It is subject to periodical, and almost annual, rises, usually in the spring, when the water overflows its banks, and submerges thousands of acres of bottom lands which are, at other seasons of the year, dry and valuable for timber, grass, and even agriculture. The stage of water necessary to overflow these lands is not extraordinary or unusual high water, in the popular sense, for it is liable to occur, and does occur, almost every year. And yet it would hardly be claimed that the title of the

owners to these lands is qualified, and that the public might, in aid of navigation, by dams or other artificial means, maintain the water of the river at such a height as to permanently submerge and destroy these lands without making compensation to the owners. Any such definition of "high-water mark," as a line between riparian owners and the public, is clearly inapplicable to inland fresh-water rivers and lakes, which are subject to frequent rises, causing them to overflow their natural banks. "High water," as applied to the sea, or rivers where the tide ebbs and flows, has a definite meaning. It is marked by the periodical flow of the tide, excluding the advance of the water above the line, in the case of the sea by winds and storms, and in the case of the river by floods and freshets. But in the case of fresh-water rivers and lakes—in which there is no ebb and flow of the tide, but which are subject to irregular and occasional changes of height, without fixed quantity of time, except that they are periodical, recurring with the wet or dry seasons of the year—high-water mark, as a line between a riparian owner and the public, is to be determined by examining the bed and banks, and ascertaining where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark upon the soil of the bed a character distinct from that of the banks in respect to vegetation as well as respects the nature of the soil itself.

"High-water mark" means what its language implies—a water mark. It is coordinate with the limit of the bed of the water, and that only is to be considered the bed which the water occupies sufficiently long and continuously to wrest it from vegetation and destroy its value for agricultural purposes. Ordinarily the slope of the bank and the character of its soil are such that the water impresses a distinct character on the soil, as well as on the vegetation. In some places, however, where the banks are low and flat, the water does not impress on the soil any well-defined line of demarcation between the bed and the banks. In such cases the effect of the water upon vegetation must be the principal test in determining the location of high-water mark, as a line between the riparian owner and the public. It is the point up to which the presence and action of the water is so continuous as to destroy the value of the land for agricultural purposes by preventing the growth of vegetation, constituting what may be termed an ordinary agricultural crop—for example, hay. (Howard *v.* Ingersoll, 13 How., 381; Stover *v.* Jack, 60 Pa. St., 339; Houghton *v.* Chicago, etc., Railroad Co., 47 Iowa, 370; Plumb *v.* McGannon, 32 U. C. Q. B., 8; Gould, Waters, sec. 5.)

The evidence tends to show that what is proposed to be done under this act is to permanently maintain the water at a uniform height above high-water mark, as thus defined, to the material damage of lands of riparian owners. This constitutes a taking of their property which entitlest them to compensation. (Weaver *v.* Boom Co., 28 Minn., 534; 11 N. W., 114.) It follows that the benefits for which appellants' lands have been assessed are not secured to them by the proceedings under this act.

We have assumed as facts what the evidence tends to prove, but it is proper to add that these proceedings are not conclusive on the riparian owners who are not parties to them, and, as the act contains no provision for making them parties, it is impossible in any proceedings under it to certainly determine that any benefit is secured to appellants.

Mr. BERKMAN. Speaking of the conditions at the outlet of the lake, the riparian owners respectfully ask that the commission use its influence with the operators of the dam at the outlet so that the stop logs may be taken out in order to make room for the water that will run in from the spring run-off on account of having had an unusual precipitation this last winter.

Then we ask that in addition to the quoting of the Minnetonka decision referred to by Mr. Hilton, the decision in the case of Stenberg *v.* The County Commissioners of Blue Earth County (112 Minn., 117), be inserted in the record.

(The decision in the above case referred to by Mr. Berkman is as follows:)

JAGGARD, J.: The plaintiff and appellant sought to enjoin the construction of a permanent dam across a natural outlet of Jackson Lake in Blue Earth County. The county commissioners had begun to make the dam pursuant

to chaper 104 of the laws of 1907 (R. L. sup., 1909, 434–2), providing that the county board in any one year may appropriate not to exceed $300 for erecting or maintaining sufficient dams or embankments upon or along the shores of the lake to keep and maintain the water in the lake *at its natural and usual height and level.* (The italics are ours.) The lake in question was shallow, about two and a quarter miles long and one-fourth mile in width, and surrounded by a large farming country, including the land belonging to plaintiff. The plaintiff insists that, if the dam were constructed, it would raise the water in the lake to a permanent level some 18 inches or two feet above the natural level, to the injury of her land and the destruction of a large part of it for agricultural purposes. The trial court held that plaintiff was not entitled to the relief asked for. This appeal was taken from its order denying plaintiff's motion for a new trial.

Plaintiff, as a riparian owner, has shown such an interest in the controversy as to entitle her to a judicial determination of the questions raised, but has not shown a right to the relief sought. The law was constitutional. The controversy is primarily determined by the general law of waters. No riparian owner has a right to complain of improvements by the public whereby water is maintained in a condition which nature has given it. "Aqua currit, et debet currere ut currere solabat." (Farnham, Waters, p. 1765; see vol. 1, c. 6.) The law justified the maintenance of the lake at its natural and usual height and level. That height, necessarily more or less marked "upon the soil of the bed (of the lake, has) a character distinct from that of the banks in respect to vegetation as well as respects the nature of the soil itself." Damages consequent thereon to riparian owners was damnum absque injuria, for which they were entitled to no compensation. (Mitchell, J., In Re Lake Minnetonka Improvement, 56 Minn., 513; 58 N. W., 295; 45 Am. St., 494.)

The question then arises whether the facts showed such a case, or one in which lowlands although occasionally overflowed, belonged to the riparian owner, and could not be taken without due compensation. The trial court expressly found that the natural outlet of the lake had been for many years interfered with, sometimes lowered, sometimes raised; that the proposed dam will raise the water in the lake some 18 inches, or to its usual stage, and that the facts brought the case within the limits assigned to the Minnetonka Improvement case. These facts were vigorously contested. There was much and cogent evidence tending to sustain plaintiff's contention. The matter is one of grave doubt. There was, however, evidence tending to sustain the findings of the trial court. The soil in the bottom of the lake was a fine mulch silt. It was sandy along some of the shores. A surveyor described this shore as a sandy beach. But parts of the shores of many lakes in this State during dry period have been used for gardens, pastures, and the like. This fact does not prevent the State from restoring the natural level, any more than the building of piers on the Mississippi at its low stage prevents public authorities from increasing the height of the level of the water by discharging accumulated water from its reservoirs. The rule laid down in the Minnetonka case is not reasonably to be construed as limiting the right of the public to increase the level of the body of water to cases wherein the water mark made by vegetation appears everywhere on the shore line. Indeed, the character of the vegetation itself may constitute a water mark.

We conclude that, within the familiar rule on this subject, the findings of the trial court must be affirmed.

ARGUMENT OF FRANK H. KEEFER, K. C.

Mr. KEEFER. Mr. Chairman and gentlemen, the Province of Ontario is, as you know, a landowner on both lakes, in that way differing slightly from Minnesota, which owns lands on only one of the lakes. It is also a proprietor of power, and, therefore, whatever is said regarding the best interests of the power proposition is most applicable to the Province as a Province. But, in addition to that, it is most vitally interested in the navigation question, the fishery question, and all that relates to the Federal Government, the Federal Government being practically but a trustee of those interests for the

local community there. Navigation in that district is practically a highway for those people, especially from one part of the Rainy River district to the Kenora district, unless they go around by Winnipeg. I merely preface my remarks by pointing out those facts so that you will see these matters on behalf of the Province and understand that they are not only applicable to the Dominion. I am acting also now on behalf of the Dominion, and so as to save your time whatever will be said will be said on behalf of both the Dominion and the Province.

Before the commission met I dictated a short brief or argument, but was unfortunate in meeting with a railroad accident that prevented my giving to the printing of it the supervision that I should have given it. I would like to leave it with you now with the privilege of revising and correcting it and putting it in a better form than it is in now but with the contents substantially the same.

The Province of Ontario and the Dominion of Canada have no particular ax to grind, but we want to, as far as we can, aid you in trying to harmonize the conflicting interests. As one of your commissioners has said, fortunately the conflict in this case is not international but is more a conflict between private interests. I think that my learned friends, Mr. Wyvell and Mr. Anderson, as well as myself, have practically nothing in difference in an international way, but when speaking here on behalf of the Federal Government and the Province of Ontario we do have to conflict in a certain respect with some of the private interests.

In taking up the question that is referred to you as to level or range of levels, I need not enlarge upon what has already been so fully said, that unless you take a broad view of that question and not a narrow view you have nothing more to say, but if you take a broad view of it, it really means what range of levels is most advantageous. Mr. Campbell has said in his usual forceful manner that the very words of the question "different seasons" of the year must indicate different levels.

When you couple with that the question of the different uses that are outlined to you—for instance, what is the most advantageous use for power and what is the most advantageous use for navigation, when common sense tells us that power and navigation conflict, one wanting a uniform level and one wanting a range of levels—it is needless to enlarge upon the point that it is not an actual level that you are asked to find.

Just passing on, then, from that view, I would like to substantiate a fact that has been once or twice referred to here, and that is that the lake in its natural state has a range of 10 feet, and perhaps 12 feet. That was very explicitly referred to by Mr. Lawson in his report on the geology of the Lake of the Woods, page 18cc, published under date of 1884, wherein he says:

> The level of Shoal Lake is much more constant than that of the Lake of the Woods, which has a rise and fall through a range of 10 feet.

I think it is wise to settle the upper limit of that range, which, fortunately, we can do on the Lake of the Woods, as 1,062.4 or 1,062.9, according to Mr. White's evidence at page 12 of the 1915 hearings. That high-water level has been most accurately determined by the Kennedy bench marks, to which reference has been made at page 170 of the report of the consulting engineers.

Having gotten that premise that we have the high-water mark and that we have in a natural state a 10-foot range, you are asked to find what is the best "level." I need not refer to the fact that you have to take also into consideration with that question the wording of article 9 and the covering letter referring that matter to you, in which it is stated that you are to examine and report upon the facts and circumstances of the particular questions and matters referred to, together with such conclusions and recommendations as may be appropriate. I think it is not necessary to say to you that I think you should find "a range of levels." If we have that natural range of 10 feet, the range is certainly controlled and can be narrowed down by an artificial regulation, and really the question for you is what is the best artificial regulation. To grasp that we have to take into consideration the different interests concerned. The different interests are:

(*a*) Domestic and sanitary.
(*b*) Navigation and transportation.
(*c*) Fishing.
(*d*) Power.
(*e*) The most advantageous use of the shores and harbors.
(*f*) The most advantageous use of waters flowing into and out of. Then the question must be interpreted as meaning, What are the levels by which all of the above interests can best be served? Or, in other words, what is the best "range of levels?"

It is not necessary to detain you on domestic and sanitary questions. I do not agree with Congressman Steenerson that power is not a domestic question. One of the great uses of power is for light and heat. But we can pass that.

Mr. TAWNEY. Mr. Keefer, do you think that the language used there, "domestic and sanitary purposes," has any reference whatever to any other use than that for sanitary and household use?

Mr. KEEFER. I think that view is the correct view, to answer you absolutely frankly.

Mr. TAWNEY. Because they use the same language in the reference involving the pollution of these waters, and they get that language from article 8, where the various uses are specified. All the other uses are mentioned specifically, and therefore it could not include the use of power for anything except domestic and sanitary purposes.

Mr. KEEFER. I think that is right, sir; but at the same time, when you are taking a broad view of this you can not ignore the fact that power is of great importance for domestic purposes.

Mr. TAWNEY. Yes; navigation is, but navigation would be just as much domestic as power is.

Mr. KEEFER. I would hardly call boating domestic.

Mr. MIGNAULT. There is this fact, that power is specifically referred to as a separate subject.

Mr. KEEFER. I think you are right on that point.

Mr. MIGNAULT. And I would agree, in so far as I have any opinion now, with what Mr. Tawney has stated. I think the idea is this, the precedence as to uses is founded on the consideration that domestic and sanitary uses come first. If there were a deficiency of water, these uses must be first satisfied; but I do not think it goes any further.

Mr. KEEFER. I do not think those uses for domestic and sanitary purposes need detain us at all. If there is any difficulty with the

matter, all you have to do is to peruse the sanitary report set out at page 297 of the Winnipeg hearings and you have very little difficulty left.

Mr. POWELL. Mr. Keefer, this domestic use, you will remember, is a right that is vested in the riparian owner and to that extent, whatever that extent may be, he has the absolute right to abstract water from a stream. He has a right to use the water that passes through his land, but he must pass it on undiminished in quantity.

Mr. KEEFER. Yes; that is true. I hope that as a result of the work that your commission is doing in connection with the pollution investigation that the sanitary phase of using this water will be very much simplified. When it was originally used in the treaty, I think it was contemplated using it for flushing.

I will now take up the subject of transportation and navigation. Gov. Glenn, at Kenora, before he had to go away, said it was a self-evident fact that the deeper the water the better the navigation. I think that is true. The more water we have the better navigation. Mr. Turner, when he was on your commission, brought the matter prominently to the front at once in interrogating Mr. G. A. Ralph, drainage engineer for the State of Minnesota. I quote from Mr. Ralph's testimony, as follows:

Mr. TURNER. What are the peculiar advantages of maintaining a higher level as against a lower level?

Mr. RALPH. The only advantage would be that navigation can be carried on at less expense.

Mr. TURNER. It would be a great aid to navigation?

Mr. RALPH. Yes.

Counsel for Kenora, Mr. McLennan, has amplified that navigation phase. If there be any doubt on the subject, I would ask you to look at the evidence given by the navigation interests, especially that contained in the testimony of Mr. Graham at your first hearings at International Falls, which was supplemented by that of Capt. Hooper, Capt. McRitchie, Capt. Hickey, Capt. Henderson, and Capt. Kendall.

You have had presented to you the amount of expenditure that has been made to aid navigation. Mr. Harcourt, engineer for the Department of Public Works, Canada, on page 453 of the 1915 hearings, shows that for navigation purposes $284,299.04 had, up to the date of the time he was testifying, been expended. They did not even neglect 4 cents. All these things, I think, will make it clear that there is no necessity for my taking up your time further on the importance of navigation.

Before I leave that subject I would like to recall the fact that at the time the Government of the United States took this matter up through official correspondence with the Government of Canada in 1905, the whole basis of their request was high water for navigation. They asked for a minimum of not less than 7.2 on the Warroad gauge. I think here is the proper time to mention the fact that at that time not only Canada, but the United States and Warroad were vitally interested in having high water for navigation. If it was advisable for navigation to have a minimum in 1905 or 1906, before the low-water period came along in 1911 or 1912, I can not logically see how it is inadvisable to have it now, or why, on the ground of navigation, a reduction should be asked for.

Mr. POWELL. I find in Gould on Waters, third edition, at page 397, a paragraph on "Ordinary use of the water," which it might be well

for you to read for the benefit of the lay members of the commission at any rate.

Mr. KEEFER. At the suggestion of Mr. Powell I will read the paragraph referred to, which is as follows:

Ordinary use of the water.—Each riparian proprietor has a right to the ordinary use of the water flowing past his land, for the purpose of supplying his natural wants, including the use of the water for domestic purposes of his home or farm, such as drinking, washing, or cooking, and for his stock. For these natural uses, by the weight of authority, he may, if necessary, consume all the water of the stream. This right is his only, and is strictly confined to riparian land. He has also the right to use it for any other purpose, as for irrigation or manufactures; but this right to the extraordinary use of water is inferior to the right to its ordinary use; and if the water of the stream is barely sufficient to answer the natural wants of the different proprietors, none of them can use the water for such extraordinary purposes as irrigation or manufactures. It was formerly held that the diversion of the water for the purpose of irrigating the land of a riparian proprietor is a natural want, and that an action could not be maintained by a lower proprietor, who is thereby injured for want of irrigation; but, according to more recent decisions, a diversion of water for this purpose is an extraordinary and not an ordinary use and can only be exercised reasonably and with a proper regard to the right of the other proprietors to apply the water to the same or other purposes. The term "domestic purposes" extends to culinary and household purposes, to the watering of a garden, and to the cleaning and washing, feeding, and supplying the ordinary quantity of cattle. It would appear to extend also to brewing, washing of carriages, but it does not include such manufacturing use as the grinding, washing, and cooling of rubber.

I am very glad that you gave me that reference, Mr. Powell.

Mr. ANDERSON. I do not suppose anyone will suggest that the use for domestic purposes will affect the level of the lake.

Mr. POWELL. It is of such infinitesimal importance in regard to quantity that we might dispense with any discussion.

Mr. BERKMAN. Might not boating, etc., under the term of domestic use?

Mr. KEEFER. I suppose if we were going to consider boating and fishing, the better water for boating and fishing the more use you could make of it.

Mr. ANDERSON. Mr. Berkman is introducing the question of navigation now.

Mr. KEEFER. Before I leave the subject of the importance of navigation, it is quite proper for you to ask me what representation the Federal Government or the Province of Ontario makes to you as to what is the best level for navigation in answer to this question. I think that is best answered by taking the evidence of the Dominion hydrographer, Mr. Stewart, who has charge of the surveys for our country. On page 435 of the 1916 hearings you will find a statement by him to the effect that 1,060.5 to 1,061 is an advisable level for navigation.

I will now leave navigation and take up fishing. I will try and harmonize that level, if I can, with fishing. There are two kinds of fish: The valuable and the less valuable. The evidence of any fish expert, like Mr. Arthur Johnson or Prof. Prince, shows that the valuable fish seek and thrive in deep water. So you can not go wrong from the fishing point of view in having high levels as long as you have them uniform.

We next come to the question of power, I have been criticised—and I think rightly so—by those interested in power, particularly the Manitoba branch of the Dominion Government, in that I have not in

the brief set out more in detail the importance of power; but I have taken it, as I think I am entitled to take it, as what you might call res ipsa loquitur—it speaks for itself. You have been up to Winnipeg and have seen how the power is used. I thought it was utterly unnecessary to dilate on the importance of power. The question is, What is the best use of this water for power purposes?

Power is, so far as you are concerned in this reference, divided into two branches, one down the river, which is so well represented by Mr. Campbell, Mr. Laird, and others, and the other branch, the powers at the outlet, represented by Mr. McLennan, and also that of the Lake of the Woods Milling Co., represented by Mr. Wilson, and also the power at the Kenora Dam, represented by Mr. Rockwood. Those two types of powers, so far as you are concerned, conflict on the question of levels. The two interests, one at the lake outlet and the other down the river—I am not dealing with Rainy Lake at present at all—conflict in this way: Down the river they want as large a range as you can possibly give them so as to be sure of a constant flow. At the outlet they want as high a level as you can give them and almost a constant level at that point.

As to the evidence of what the level should be at the outlet, if you will refer to Mr. Hastings's testimony, who was before you at Kenora, representing the Lake of the Woods Milling Co., you will find that he would like the level a foot higher than it was at that time. On nearly all occasions upon which you have visited that lake the level was at 1060.5. He asked for a foot higher than that for industrial purposes. Mr. Ferguson, who was the consulting engineer for Mr. Rockwood's client, also practically asked for the same.

With respect to the power down the river, you have Mr. Lea's testimony, given at the 1916 hearings, the testimony of Mr. Challies, as representing the power branch of the Manitoba government, and that of Mr. Acres, representing the Ontario Hydroelectric Commission, asking for as wide a range as permissible governed by the other factors. Then, in order to try to harmonize these different interests, I invite your attention to the testimony of Mr. Stewart, appearing at page 439 of the record. He asks you to give, on account of these power interests, not less than 6 feet, as that does not conflict with navigation, the low water being in the winter season. In that 6 feet we must bear in mind that having taken practically the 1,062.5 as the extraordinary high-water mark, the only usable range is about 4½ feet, because from 1,061 to 1,062.5, according to Mr. Meyer's testimony, it is merely for flood reserve. I am trying to approach this problem as an engineering problem, and not as a legal problem, and if I stumble on some of these engineering terms I hope you will have sympathy for me. But the usable range in that 6 feet is only 4½ feet. For that reason I am going to ask you in your recommendation to lower the minimum. Instead of its being from 1,062.5 as the maximum down to 1,056.5, as I ask you to bring it down to 1,056, and I show you that that will not conflict much with navigation, according to the best records. In presenting these data before you I am doing so on what has happened during the past 15 or 20 years. I want you to bear in mind that the people of that district have become accustomed to a state of affairs. Navigation has adapted itself to that state of affairs. The power interests have done likewise

at the outlet, and we are trying to take all those things into consideration. We have no axe to grind; we are trying to aid you and serve you in that way.

Mr. POWELL. The minimum you recommend is what?

Mr. KEEFER. One thousand and fifty-six.

Mr. POWELL. And the maximum?

Mr. KEEFER. The extreme maximum is 1,062.5. I would like to ask for an ordinary high-water mark or ordinary maximum of 1,061. In answer to a question by Mr. Campbell this morning Mr. Meyer said that for 23 years during the period of navigation for the four months from June to September the level has been 50 per cent of the time at 1,060.4 and for 25 per cent of the time at 1,061.2.

Mr. Meyer says that if you enlarge the outlet to make necessary improvements to take care of that flood reserve you will never have the water up to 1,062.5. Do these things and you will have your water standing for 90 per cent of the time at 1,061. All we ask is that that 90 per cent of the time should be especially in the navigation period. The lake could be drawn down in the winter and would in the spring come back to that level.

Mr. MAGRATH. You say that for 90 per cent of the time it would be at 1,061, or within a certain limit of that?

Mr. KEEFER. Within a few inches of it. You can not hold it constantly at that. On that point Mr. Meyer's testimony is given at page 453 of the record, corroborating Mr. Stewart. His testimony shows that for 90 per cent of the time during the summer season the water will remain within half a foot of 1,061, and for 1 per cent or less of the time it might go a foot higher. That 1 per cent of the time would represent 3 or 4 weeks out of the 21 years, and that the extreme maximum of 1,062.5 might never be reached.

I have had the greatest pleasure all through these hearings of listening to your consulting engineers and to see the result of the careful work they have given you. I join here with all the other engineers who have spoken on the point in saying how thoroughly they have done their work and with what ability they have brought the facts before you. I simply ask you to take your own engineers' facts. I do not ask for anything different.

There are some other phases in that question that I think I should call to your attention. With the most advantageous use of the shores and harbors you have to deal. There is no question but what you have a use of the shores other than at Warroad. I was very glad to hear my friends, Mr. Samuelson and Mr. Steenerson, say to you that you had to look upon this as a utilitarian doctrine; what is the greatest good to the greatest number. It is not what is the greatest good for the people at Warroad or at Kenora, but for all of the interests. Therefore I say do not only think of shores and the people affected on the shores as those at Warroad. Think for a moment of those industries that have been established on the shores at the north end of the lake and of the navigation interests that have built their boats on a certain basis. Take the town of Kenora which has spent its money in building its plant there, all based upon what has taken place before. When you think of those along with the south-shore interests, then you will try and harmonize what is the best level from the point of view of the shores. With the harbors I need not take

up your time. The desirability for better water in a harbor goes without cavil. Deep water will answer that question, 1,060 or 1,061. My friend, Maj. Peek, has told you that owing to the dry season in 1912 they lowered their level, and if you raise it around 1,062 there might be a necessity for spending money for the protection of the Zipple breakwater and properties at Warroad. Outside of that I know of nothing that will conflict with taking the water for navigation purpose right up to 1,064, if you want to.

I particularly bespeak careful consideration by you of the navigation of Rainy River. I have lived in that country for some 25 years. I have had the pleasure of stumping that country along the banks of that river. I did not have the pleasure of being on the celebrated trip that the commission took when they found that the river needed all the protection of navigation that was possible. I would ask you most earnestly and seriously not to lose sight in the future of the navigation of that river. In taking care of that phase of the situation you will be benefiting both sides of the boundary. Mr. Ralph's evidence on that point is the best summarization of the advantages of Rainy River. I quote as follows from his testimony, appearing on page 92 of the 1912 hearings:

Mr. KEEFER. You are familiar with the Rainy River?

Mr. RALPH. Yes, sir.

Mr. KEEFER. Do you consider the maintenance of the navigability of the Rainy River an important thing for this part of the country?

Mr. RALPH. I believe it is very important. I believe the Lake of the Woods in time to come will be one of the greatest spots on the continent. I believe it will be found to be one of the most beautiful lakes on the American continent, and that it will attract tourists from all over the world, and it will be highly important to keep open navigation on the Rainy River as far as Fort Frances.

The last question referred to you is with reference to the water flowing out. About six years ago you had a settlement go in on the expanses of the Winnipeg River that is called Minaki. They apparently have ignored the question of levels like the Warroad people. They have built their docks without reference to them, and they are going to be hurt by letting down for a longer period of time what would only come in the springtime; that is, a large volume of water when we have to enlarge the outlet to keep it at a more constant level above. I would refer you to Mr. Richardson's testimony appearing on page 279 of the 1916 hearings. He shows that they have built their docks in entire disregard of high-water marks, and there is trouble for you to consider there; but you must let the water out freely or you can not conserve the water up above.

I have tried to summarize this matter on page 13 of my brief. I endeavor to show that the ordinary level as outlined by Mr. Stewart of 1,061 is the best to be adopted. Mr. Stewart did speak of 1.060.5. He mentioned that figure because he was under the impression at that time that probably 2 feet would be required for the spring flood. After reading Mr. Meyer's testimony, wherein I asked him (Meyer) if we took 1,061 as a level when if ever we should reach 1,062.5, and received answer, "Never." Mr. Stewart now asks you, through me, to make that spilling point 1,061, in view of Mr. Meyer's testimony.

There is one other interest that has not been touched upon, namely, the island campers. You will remember that at the Winnipeg hearing they were opposed to taking 1,062.5. When it was explained to their counsel and to Mr. Deacon, who was their chief spokesman, that

for 90 per cent of the time they would have it around what they were talking of, they were quite satisfied. Mr. Deacon was willing to climb up to 1,061 and, if necessary, to 1,061.5. So there is no conflict with the campers. We want to be reasonable with them also.

I therefore submit to you that you would not go very far wrong from the evidence if you should recommend the ordinary maximum level of 1,061 as the one that would cause the least disturbance in conditions that have existed and that have been permitted since the dams were constructed, during which period nearly all of the settlers have settled around the south shore. That is the level to which navigation and the industrial life of that district has adapted itself. Bear in mind that the first of those dams was constructed in 1889, 25 years ago. I think that should not be lost sight of. They have adapted themselves to these conditions. I do not want to press the argument of vested rights so strongly, but you were asked to report upon all the particular questions and matters that come with this question.

Mr. TAWNEY. These dams that you are now speaking of are the dams at the outlet of the lake.

Mr. KEEFER. Yes, sir.

Mr. TAWNEY. As to the effect of the raising of the levels: Do you think any rights could be acquired in view of the absolute impossibility of the people on the south shore of the lake in the United States securing any remedy for the injury they sustain?

Mr. KEEFER. I want to deal with that in coming to the second question. I am discussing more particularly now the question of levels.

Mr. TAWNEY. You are commenting on the length of time that these dams had existed when these people settled there.

Mr. KEEFER. Do not think that in any part of my argument or in any of our engineering testimony we are trying to escape from any legal liability or even moral liability. But when you have to make an answer to question 1—what is the most advantageous use of these waters for these different interests—you must not be thinking only of the evidence pertaining to the south shore. It may be that in getting the greatest good for the greatest number they may have to receive compensation. I do not for a moment contend that if you raise the water above the normal high-water mark that they have not the right to compensation.

Mr. TAWNEY. What do you think of this view of that reference? That the Governments themselves recognized that there would be a more advantageous use of the waters of the lake and the waters flowing into and from the lake in the higher level, and that, in consequence, lands would be submerged and, therefore, there would be placed upon the commission the duty of ascertaining the extent of the lands submerged as well as their value. That is, the two Governments recognized that in the higher level there was necessarily involved the more advantageous use of the waters by simply requiring us to report on the extent and value of the lands submerged.

Mr. POWELL. They took it for granted that the level could be raised in some way.

Mr. KEEFER. My view is that we should bear in mind what the conditions were when the question came up to you. When this question was submitted to you the basis of the complaint was not high water. The difficulty was stated in the report to the War Department

of Maj. Darby, upon whose recommendation, apparently, the question was immediately followed up by the official communication from the United States to Canada. He reported in 1911, and in 1912 you had the question referred to you. His report shows that the whole basis of the complaint then was low water; that the difficulty was that there was not enough water. He visits the Norman Dam and says that dam is not the cause of it; it is the natural state of affairs just then, etc. That all shows that the United States Government was wanting, apparently, better water. If there was any flooding by that, then value what that would be. They have expressed it in a peculiar way in that second question, and we have to grapple with that. We have had a great deal of light thrown upon that question by the various counsel, and I have a great deal of diffidence in endeavoring to illuminate it any more, but I am going to try.

You have in that second question to answer if the certain level that you recommend is higher than the normal or natural level what is the amount in acreage of land overflowed and what is the value of it. That at once brings us to the question that is the bone of contention here, the normal or natural level.

Let me state right here that had the question come up to you as it did come up in one of the official communications of the War Department to the engineers at Warroad, what is the normal level under natural conditions, you would have had no difficulty about it at all. That is a straight, clean-cut question, What is the normal level under natural conditions? The answer back was, We can not give you any data on that; there are no marks to go by; all we can tell is what is the high-water mark—1,062.5; but we can tell you what the normal level under existing conditions is. And they do tell us. I think, when you look at all the surrounding circumstances the question that you are asked to find is, What is the normal level of that lake under natural conditions; what is the normal level of that lake to-day? I can not conceive that if they were asking you to find the level of that lake, and if the obstructions had been there for some 22 years, that they were going to ask you to go behind all that in arriving at that answer; that they were going to ask you to sweep aside the existing state of affairs. I do not think that is the situation. Neither is it the situation if you take the history of the case, nor if you take the official usage of words that have taken place between the respective Government officials. We have had a great deal said about "permitted," not only "permitted," but that other phrase in article 8 of the treaty, "existing uses." I want you to look at this question from all of these angles and then say if they meant to ask you what is the normal level under natural conditions or whether they did not mean to ask you what is the normal level of the lake, and they threw a surplus word in there and caused all this trouble.

There is a new state of nature created there by these dams. Are you going to ignore it? You may have had, in the glacial period, a different state. Where is your natural state going to begin, as Mr. Laird pointed out?

Mr. MIGNAULT. Yes; but the whole bone of controversy was that the natural condition had been changed.

Mr. KEEFER. Quite right, and the whole bone of controversy was that this question comes up to you with those natural conditions

changed whereby we are told that these rains had raised the water 3 feet, and the complaint was that it was too low, and they want you to find out what it would be under normal conditions with the changes.

Mr. MIGNAULT. What would you say was the normal condition? Was the normal condition 1,061, which has prevailed most of the time under control?

Mr KEEFER. I can not do better than to repeat what your consulting engineers say; yes.

Mr. MIGNAULT. Does not that eliminate any question of valuing land submerged at this so-called normal level?

Mr. KEEFER. That is the ordinary high-water mark of that period.

Mr. MIGNAULT. Then the consequence would be that it would be immaterial whether land has been submerged, if we are to take the level which has existed, say, 90 per cent of the time since the lake has been under control.

Mr. KEEFER. That is the logical direct sequence of my argument, and after bringing that forward and endeavoring to impress it upon you, I hope that the Warroad people will realize the importance of it and be willing to moderate their demands, but apart from that we come forward and say, "Gentlemen, we will leave it to you to say how much of this land it is advisable to purchase outright, if they have a little down to the meander line. Say what you would recommend be acquired: not compensated for, but bought outright, and say what portion of it we should pay." Half of it, if necessary. I do not think my Government would quarrel with you if you said pay the whole of it. We do not want you to say that we are approaching this matter in any niggardly way. When you reason this matter out, in view of the correspondence, there is not much of a claim for compensation except for the damage done by the raising of the water past the natural high-water mark since 1878, after which time nearly all the people on the south shore went in there.

Mr. MIGNAULT. But referring to the correspondence, it uses the word "normal." When the question is put to us by this reference they qualify the word "normal" by using the word "natural." Is it not reasonable to say, then, that would mean that if the level which we recommend is different from the normal, that is to say, the natural level of the lake, how much land would be submerged?

Mr. KEEFER. I do not agree with you there. Nowhere in the correspondence from the officials at Warroad do they use the word "natural."

Mr. TAWNEY. I wish you would cite the particular part of the letter in which the normal level of the lake under natural conditions is mentioned by the War Department in its request for information from the district engineer.

Mr. KEEFER. The normal level of the lake under natural conditions is in the text, sir, of the consulting engineers. If you look at the last paragraph on page 12 of the text you will find that the engineers say:

As a result of high water during the summer of 1905, numerous protests were received by the United States Department of State from settlers on the southerly shore of the Lake of the Woods complaining of damage to their land from high water. No immediate action was taken. Further complaints

were made to the department, and on February 1, 1908, the United States Secretary of State requested from the Secretary of War information respecting the relation between 7.2 feet on the Warroad gauge and "the normal level of the lake under natural conditions."

The second paragraph on page 167 of the text reads as follows:

In 1908, when having the subject of possible damage to riparian owners on the Lake of the Woods under its consideration, the office of the Chief of Engineers, United States War Department, in a memorandum dated February 25, 1908, and transmitted by the Secretary of War to the Secretary of State, states:

"As the Lake of the Woods is a navigable water of the United States, and Congress has exercised jurisdiction by making an appropdiation for the improvement of Warroad Harbor with the view of a lake level of 7.2 feet, it is thought that the question of possible damage to riparian owners by the maintenance of that level must be considered upon the basis of the relation to ordinary high-water mark under general natural conditions, and not to the normal lake level."

They are asking the officials at Warroad to tell them what that is, the normal level under natural conditions. The engineers practically—as you will see by the correspondence—reported back, "We can not tell you; we have no data." Now, let us look and see what construction has been put upon the word "normal" without the word "natural," and whether that meant as it was or as it is; as it was prior to the time or as it is now. The best construction of that word, I take it, would be contained in the correspondence between the parties to this reference. The highest use of it, of course, we have in the official correspondence from the Secretary of State of the United States to Canada. In the letter of the Secretary of State to the British chargé d'affaires, dated the 6th day of May, 1905, it is stated that the "Improvement depends very largely upon the level of the Lake of the Woods, all the estimates for dredging the harbor of Warroad and its approaches being based upon the maintenance of this level at or above the datum 7.2 feet on the Warroad Harbor gauge. During the past year it appears that the gauge reached that reading only for the half of one day, and that it fell as low as 6 feet for several days during the season of navigation. High-water mark is reported to be about 1.51 feet above this reading of 7.2 Warroad.

Some years ago the Keewatin Power Co. built a dam across one of the outlets of Lake of the Woods near Rat Portage, which dam it is understood subsequently passed to the control of the provincial government of Ontario, and it is thought that the level of the lake could be easily controlled by inserting or removing stop planks in this dam. In view of this, it is suggested by the Secretary of War in his letter on this subject of the 26th ultimo that an agreement might be reached with the Canadian authorities by which the dam could be so operated as to prevent the level of the lake falling below the datum of 7.2 feet.

I have the honor, therefore, to ask if you will be so good as to lay the matter before the proper authorities of the Dominion, with a view to reaching the suggested "normal" level of the lake in question.

There is the first use of the word "normal" in the official correspondence between the two countries that I could find, and defines normal as 7.2.

Maj. Shunk, in his report datetd January 11, 1911, states as follows in paragraph 5:

The citizens of Warroad apparently think that the present low stage of water is to be permanent.

I wish you would bear this letter in mind, as that is the basis of this reference at the time to your commission. The reference came to you in 1912. Maj. Shunk continues:

Equal alarm was felt about a high stage in 1907, and complaints forwarded to the Secretary of State. * * * It is reasonable to suppose that the "normal" lake level will be restored.

Mr. MIGNAULT. Just there, Mr. Keefer; when were the complaints made as to the high level?

Mr. KEEFER. In 1905.

Mr. MIGNAULT. Then, apparently, complaints were made in 1911 or in 1910 that the level of the lake was too low?

Mr. KEEFER. Yes, in 1911; and if you will look at the tables in the record you will see that the lake dropped at that period to the lowest level it had ever reached. I think it was 1,056.7. Then it began to rise, and bear in mind that it was at that time that the level of the lake was so very low that they changed their system of dredging at Warroad and decided to go lower. Prior to that they were asking us to avoid that dredging.

Mr. MIGNAULT. Where was Maj. Shunk located at that time.

Mr. KEEFER. Maj. Shunk was the engineer in charge of that district.

Mr. MIGNAULT. One of the predecessors of Maj. Peek?

Mr. KEEFER. He was there previous to Maj. Peek's time. Maj. Peek has been there only for a short period.

Mr. MIGNAULT. But he was the district engineer having jurisdiction over the Lake of the Woods?

Mr. KEEFER. When I come up against these trained men of the War Department I pay the greatest attention, much more attention than I would pay to other classes of testimony that we have received.

Following that up, Maj. Shunk in 1911 says:

It is not a fact that 7.2 level was derived from seasons when there was an exceptionally high stage of water.

He was being rapped over the knuckles, perhaps, for having taken that as the high stage. He continues:

It was first assumed in the absence of records that the best information available from marks and residents about the lakes. At the end of 1906, observations of five years showed a mean level during navigation season of 7.24, almost exactly what had been assumed. Including the subsequent years, the mean level during navigation seasons is 7 feet.

That is practically just what your engineers have reported, a little over 1,060. He then continues:

As both exceptionally high and exceptionally low levels have occurred since 1899, when records begin, it is not likely that the ultimate mean level during navigation season will get beyond the limits of 7 on one side and 7.2 on the other.

In 1910 and 1911 the citizens of Warroad became very uneasy over the low stage of water, and Maj. Shunk made an investigation and reported on the 9th of June, when the water was as low as 3.25 on the gauge:

This is the lowest level of which we have record, though old settlers mention a time some 16 years ago when there was an even lower stage of water.

On the 30th of June, 1911, he reports upon the investigation he made of the Norman Dam, and amongst other remarks, states:

It is this Norman Dam which has been indicated as the probable cause of low water on the Lake of the Woods, and my inspection fully confirms this report.

Now, I would like you to keep that statement in mind. In explanation of the statement he draws attention to leakage through the dam and states:

This is undoubtedly one cause, and a very considerable one, of the slow recovery of normal level of that lake.

Further on in the same letter, appearing on page 479 of the appendix to the Winnipeg hearing of 1916, he uses the word again, when he says:

It would not have been serious had not last season been very unusually dry, and I think that the lake would undoubtedly have recovered its normal level, had the dam been water-tight as it ought to be.

That is when, by mistake, they kept out the stop logs.

He continues:

It is my opinion that the Rubble mound referred to ought to be made water-tight, and as the United States has a considerable interest in the regulation of lake levels, I recommend that the general question of regulation be referred to the International Joint Commission.

There is the beginning point of your reference. The surrounding circumstances should be taken into consideration when you are in doubt as to how to construe the question that is referred to you.

Mr. KEEFER. In the letter of June 9, which I previously quoted, he talks of bringing it up to the commission.

Paragraph 7 of the letter of June 9 says:

It would be perfectly possible by proper works at the outlet to maintain a good depth of water in the Lake of the Woods at all times. In this particular, however, the interests of navigation and those of power development are directly opposed, the one requiring constant level and very variable discharge, and the other a constant discharge with greatly varying fluctuations in lake level. It is my belief that the Canadian Government has decided for the latter alternative; intends to develop power at the outlet, and has made its channels sufficiently deep to affect the bad effects of fluctuations of lake level. It is certainly to be recommended that this matter be brought to the attention of the International Joint Commission.

Mr. Commissioner, I say, in view of the authorities that you had quoted to you, when we are construing a question like this, which is ambiguous, which is not clear, the surrounding circumstances of how it comes before you should be very, very carefully looked at. The words "normal level of the lake" clearly mean, with the existing state of affairs, something quite apart from all technical construction of the words. I therefore think that what the United States authorities had in view when they asked you to grapple with this question was to consider how best this dam could be regulated, the best way to handle the matter, what is the normal level under those conditions.

I will show you, Mr. Commissioner Mignault, where the word "natural" has been used in the correspondence in a peculiar way. If you will look at Maj. Shunk's letter to the United States authorities of date February 15, 1908, quoted at page 474 of the Winnipeg hearings, he shows that the lake is subject to extraordinary changes of

level: high and low waters, during open seasons of the year above referred to were as follows (bottom of p. 474):

1889, low water, 6.30; high water, 8.71.
1903, low water, 6.19; high water, 8.06.
1904, low water, 5.10; high water, 7.10.
1905, low water, 4.70; high water, 9.
1906, low water, 5.60; high water, 8.20.
1907, low water, 5.10; high water, 8.90.

He says:

There has been nothing unusual in the variations during the past year—

That is, 1907; low, 5.10; high, 8.90.

and I am of opinion that they were due to natural causes and not to the operation of dams.

Mr. MIGNAULT. But the word "natural" is used in a different sense.

Mr. KEEFER. I grant you that; but I wanted to be fair and say that is the only time I struck the word "natural."

Mr. MIGNAULT. The difficult, to my mind, is this: You find the word "normal" used without the word "natural" in all this correspondence, and where the two Governments use this they use both terms. I should be very much obliged if you could give me any reason for thinking that the word "normal" is not qualified by the word "natural," as used in the reference. I am not expressing any opinion now; I am seeking light.

Mr. KEEFER. I know you are, sir, thoroughly; and if I can illuminate it in any way I will. If it was a clean-cut answer that I could give to you it would be very, very simple; but I can only say to you that, in my judgment, in view of this correspondence, in view of the fact that the authorities have reported back that they could not give you natural data, and in view of their construction of the word "normal" so many times, as meaning that the existing state of affairs is being considered; that when you are construing that question, and when you are asked to deal with the questions, taking into consideration all the surrounding circumstances, it is a reasonable thing for you to say that the word "natural" is surplusage; that all they intended to ask was the normal, or natural, meaning to qualify normal. If they had meant differently, as I say, it would have been so simple to have said "normal, under natural conditions."

Mr. MIGNAULT. Your strongest argument, Mr. Feefer, is this, that natural conditions, conditions in a state of nature had been altered, and since approximately the date of the reference, over 20 years——

Mr. KEEFER. Over 22 years.

Mr. MIGNAULT. Over 22 years; and when the two Governments refer to the normal and natural condition of the lake, they mean something which existed as a fact as of the date of the reference?

Mr. KEEFER. Absolutely.

Mr. MIGNAULT. That I conceive to be your strongest argument.

Mr. KEEFER. Yes, sir.

Mr. MIGNAULT. It would not seem to me to be a very cogent argument to say that the word "natural" should be considered as surplusage. I should be very loath to come to any such conclusion. I have got to give a meaning to every word in the reference, and I

have got to presume that no word has been used without sufficient cause. But your strong argument, to my mind, is what I have stated.

Mr. KEEFER. I think that is the strongest argument that I can put before you.

Mr. MIGNAULT. I am not convinced that because Maj. Shunk has used the word "normal" in his letter, that therefore we must consider the word "normal," when joined to the word "natural," as being merely surplusage. I am not stating an opinion; I am looking for light, and I would be obliged for any.

Mr. KEEFER. There is no use of my taking up the time of the commission or of the gentlemen sitting around here by elaborating that any further; but I would recall to you another use of the word at page 470. He says:

> We call the normal level of the lake 100.

That is a transitman stating that, at page 470. He is quoting a letter from Mr. McQuarrie, who is manipulating the dam, and he says:

> We call the normal level of the lake 100. The lake has differed 10 feet between low and high water mark. It has been considerably higher than at present.

There is one other letter that I will refer to where the word "normal" is used four or five times, and then I shall pass on, sir.

If you look at page 491, you will see a very frequent use of the word "normal" by an engineer named Banks. He is giving his testimony before the War Office engineers. He speaks of it at page 491, in the fourth paragraph, saying:

> From this we can conclude that the precipitation and run-off prior to July 1 largely dominates the stages of water during the season of navigation. The soundings at Warroad having been taken at the end of a season of unusual precipitation and without much, if any, previous record as to high, mean, or low water were referred to datum of 7.20, at least 0.9 of a foot higher than normal water level, and we can scarcely expect that elevation to be maintained in years of low precipitation, etc.

Then, on the next page, 492, it is used four times there—first:

> * * * Making normal water in the Lake of the Woods 6.31 instead of 7.20. If we call 6.31 the normal elevation, we will find that the elevation of said lake was at or above normal for the months of June, July, August, and September.

The words "ordinary high-water mark" are used also in this correspondence, and they apparently construe that as coupled up with the existing dam.

I would like you to look at page 474, or, rather, we will begin with page 473:

> My assistant, Mr. Horace Dunaway, surveyor, who made the last resurvey of Warroad Harbor in December, 1905, reports that at the time of the survey the gauge read 8.1 and that the line between the aquatic vegetation of the lake (bullrushes) and the terrestrial vegetation of the banks was still several inches above the water level. It would therefore appear that the level 7.2 is well below ordinary high-water mark as it exists to-day.

He brings the high-water mark just the same as Mr. Meyer and Mr. White have reported it to be. He is taking that as the ordinary high-water mark under the existing state of affairs.

I would like particularly to refer to the report of April, 1906, of Maj. Derby, dealing with this question. I have, in my brief on file,

tried to summarize in those three or four paragraphs what that report is. He, Maj. Derby, shows the reasons why he chose 7.2 as the scale. It is natural to avoid dredging if possible. He says:

In the interest of navigation the standard low-water stage below which the level of the lake should not be permitted to fall should manifestly be the highest stage which would not invade the rights of interests other than navigation.

And then he goes on to say that the water power companies would like the minimum level of the lake held as high as possible, and the riparian owners on the shores of the lake would like the lake drained dry, as the title to its bed would then revert to them and the land could be sold for agricultural purposes.

I should like to follow his remarks on that, as they are rather striking. They follow out logically just what you said, Mr. Commissioner Mignault—that if you adopt that meaning of the word there is no compensation, and he takes that as one of his reasons why he has adopted it also. I would like to refer to that in detail in the way I have given it to you there, but I do not want to detain you further.

The logical result of that is just as you have stated, that if the War Office took that as the proper level there is no compensation. Is it right or is it wrong?

Mr. MIGNAULT. There is no correspondence, I think, Mr. Keefer—at least I know of none—in the record between the War Office and the Secretary of State leading up to the question which has been put to us by this reference.

Mr. KEEFER. None that I know of, sir. I have endeavored to get everything before you when I would hear of it, to get it on the record in some way so it might be of use to us in construing the matter as we are endeavoring to do now. I will not detain you on that further. But what I say is this, that if Maj. Derby's report under date of April, 1906, be correct as to his facts, which seems to be the case, and if the reasons and decisions quoted therein by him be sound, which I think they are, and if the dam has been operated during the past 16 years, so as to keep the level below what is claimed to be a normal level, and if 1,061 as an ordinary maximum be adopted as in answer to question 1, it would then follow that the answer to the second question could well be that the ordinary maximum of 1,061, as recommended for question 1, is not higher than the normal or natural level of the lake (especially when the Norman Dam is not to be disturbed "as an existing use of boundary waters"), that therefore there are no flooded lands or land values to be reported under question 2.

I will not detain you further with that question of existing use. Mr. Campbell elaborated that. But there is one thing I will call your attention to. Look at how the Canadian Government has construed this treaty as regarding the existing state of affairs. When they passed the act of I and II George V they gave the right of action to any party in Canada——

Mr. MIGNAULT. That is to carry out the treaty. This act ratifies the treaty, so far as Canada is concerned.

Mr. KEEFER. Section 3 of the act provides:

3. Any interference with or diversion from their natural channel of any waters in Canada which in their natural channels would flow across the

boundary between Canada and the United States or into boundary waters (as defined in the said treaty) resulting in any injury on the United States side of the boundary shall give the same rights and entitle the injured parties to the same legal remedies as if such injury took place in that part of Canada where such diversion or interference occurs; but this section shall not apply to cases existing on the eleventh day of January, one thousand nine hundred and nine, or to cases expressly covered by special agreement between His Majesty and the Government of the United States.

Section 4 provides:

The exchequer court of Canada shall have jurisdiction at the suit of any injured party or person claiming under this act in all cases in which it is sought to enforce or determine as against any person any right or obligation arising or claimed under or by virtue of this act.

Under article 8 and also under article 4 there is construction or interpretation officially by the Government.

Just before I leave that question I am quite certain that it can be properly argued to you that if the United States and Canada thought when this question was referred to you that it was very advisable to keep the water up around 7.2 as a minimum I can safely ask you to make that the finding now, and I am quite sure that the United States will never withdraw from that position as having been considered advisable then for navigation it is advisable now for navigation as for power. It is not so advisable except at the outlet, but if you take that as a level, then you have simply got to provide for the flood waters and then provide for the range.

Mr. POWELL. Mr. Keefer, I have read this over and tried to get at the meaning very carefully, and it may be the whole thing is artificially drawn.

Mr. KEEFER. Very much so.

Mr. POWELL. I do not think anyone would want to stand sponsor for it as a piece of classical English composition, and it might not be the fair thing to apply strict rules of grammatical construction or rules of composition to a matter of this kind, because it would be like applying a straightedge to a crooked stick; but at the same time it does strike me that the meaning we are contending for is the fair meaning of this doctrine:

In order to secure the most advantageous use of the waters of the Lake of the Woods, * * * is it practical and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level; and, if so, at what level?

Now comes in No. 2:

If a certain stated level is recommended in answer to question 1—

If that level disturbs the status in quo, if it disturbs things, then you are to do what? You are to consider the question—

If such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake, when maintained at such level, overflow the low lands upon its southern border, or elsewhere on its border—

"Overflow the low lands" means what? Overflow the low lands means overflow additional lands.

Mr. KEEFER. I should think so.

Mr. POWELL. Because the lake at any level would overflow some land. It means what additional land would be overflowed if they secured another level. That must be the fair inference.

Mr. KEEFER. I think so.

Mr. POWELL. Now, to go a little further. If that is the case, then it says, "What is the value of the land which will be so submerged?"

Mr. MIGNAULT. Still, you add words to the reference. You add the word "additional" there.

Mr. POWELL. Oh, no; no. I am not adding words to the reference. I am simply using words as explanatory of the words that are there. I am not adding anything. I put this forward simply as a very natural construction. Overflow the lowlands means what? Overflow what lowlands? The lands were already overflowed by the normal level, whatever it may be; they are already overflowed as to a large proportion. What is the land that you are going to overflow by pushing the water farther?

Mr. KEEFER. Taking that same point, Mr. Mignault, if you take those questions and elaborate them, as Mr. Powell has done, and read into the question the other words that are in it, I think you will not be so hesitant about its being necessary to take a word in or take a word out. What you want to know is what is the meaning of the parties; because the question is, "I have the honor to transmit to you the questions or matters of difference set forth below, for examination and report upon the facts and circumstances of the particular case." You have not got a question simply thrown at your head, with the request, "Give me an answer to that." I ask you to examine and report upon these questions and all of the facts and circumstances.

The same with section 9, because the same words are used in section 9 under which such questions are referred; so that if the question is not clear and specific, you have full latitude to inquire what is the meaning of the question. I think the Corps of Engineers have clearly shown what is their understanding of its meaning.

Mr. POWELL. To pass to what I have said, how is it consonant with reason and justice that only a portion of the lands are improperly overflowed and are subject to restitution and compensation—assuming now that the meaning I took first is the proper meaning—that is, that the normal level may be above or different from that which would be in the original condition of affairs.

Mr. KEEFER. I think that the answer to that is this, that they have considered that this way: You will find what is the normal level under the existing conditions. You might find in the advantageous use of the waters that it is advisable to put it up 2 or 3 feet above the normal level.

Mr. POWELL. That may be; but see. The United States would be entitled, Canada would be entitled, every one interested would be entitled, to have the waters of that lake in their pristine condition as by nature they were, without artificial disturbance.

Mr. KEEFER. When is that, sir? When is the pristine condition? The glacial period, or when?

Mr. POWELL. Unfortunately, I have not looked that up.

Mr. KEEFER. I have been trying and endeavoring to make my position clear. I can not say I have made it clear to you, but I have tried.

Mr. POWELL. Oh, yes; you have made your meaning very clear.

Mr. KEEFER. I have tried to make my meaning clear. I can not for a moment admit that we have done wrong, nor do I think that our

friends on this side of the line will argue that we have done wrong. There may be a loss to some property owners. I do concede the fact that a riparian owner, prior to the building of the outlet dam, who has had the water raised on him must receive compensation. From whom, is another question. I do not know, under the laws of this country, whether a person, 10 years after another normal level had been established, or another high-water mark had been established, taking into consideration all of the conditions before that—whether he would have a claim or not. That is according to the laws of the United States. I do not profess to know them in any way. But I say this: I am perfectly certain that the United States Government, in view of their request to us to hold it at 7.2 as a minimum, will never say, "You have done wrong in trying to do so."

Not as a minimum, but as an average. Take this state of affairs, sir. Suppose we had said—which we did not apparently do—we will accede to your request. The Canadian parties then had a request from this side, "Do not let it go below 7.2."

We write back and say, "Yes, we will do so." Then comes this claim: Should it be said we have done wrong. Would anybody stand in this room and say, "Canada, you have done wrong"? We tried to do what we were asked to do. Can it be argued that we have done wrong? Certainly not.

Why did not we hold it at 7.2? Look at the correspondence with the Ontario government, set out in the report. When the letter of request comes in, of May 6, 1905, to the Dominion Government, through the home office, it is then referred to the Ontario government. You will see the correspondence all set out at page 518.

I want now to remove a misapprehension about this correspondence. It then came to the Ontario government. The Ontario government then received a report back from the assistant chief engineer of public works, Mr. Fairbairn, dated July 20, 1906, page 523. He gives his reasons why he can not advise to grant the request. He shows that there are some existing mills that would be flooded out, and all that, and he sends the request back to his minister. The minister sends it back to Ottawa. Meanwhile, apparently, a communication from the war office, or somewhere, intending to recall the application, is sent, but instead of recalling it, a second letter is sent from the United States to Canada asking for an answer to the first one.

Mr. MIGNAULT. What date?

Mr. KEEFER. I want to get that date accurately; I had it here a moment ago. It is September 29, 1906, pages 521 and 522.

Mr. WYVELL. That is a communication from the chargé d'affaires from some official to your Government?

Mr. POWELL. What is the use of going any further with that at all?

Mr. KEEFER. I want to show that Ontario was trying to carry out the request as best we could. We do not like to be told we are doing wrong.

Mr. POWELL. There is no question on that score, not the slightest in the world. But assuming that to be true, as it is true, what does it show? Simply that these people had in their ideas certain necessary things that should be done in the normal conditions of affairs.

Mr. KEEFER. I will not detain you further on that, sir.

As regards question 3, I think I had better read it. It is very short. I will, from my brief, read into the notes what in an ancillary spirit is suggested for your consideration:

The answer to the third question should be upon broad lines, looking well to the future.

Theoretically and provided sufficient storage could be obtained, it should be possible to so control the outflow as to supply discharge, which is the mean of the net supply of water received into the drainage area. This mean for the last 22 years has been found to be about 16,000 cubic feet a second out of Lake of the Woods, and 5,835 feet per second for Rainy Lake.

It is, however, a physical impossibility to carry out this ideal condition, and after a careful study of the conditions that have existed during the last 22 years it has been found that a uniform discharge of 9,670 feet can be counted upon for Lake of the Woods, and 5,835 feet per second for Rainy Lake.

Another study of a variation of this method would give a variable discharge of sometimes as much as 16,000 cubic feet per second out of Lake of the Woods, and 10,000 cubic feet per second out of Rainy Lake, diminishing to 7,700 feet from Lake of the Woods and 3,500 feet from Rainy Lake.

As the works for the controlling and handling of these discharges are not yet in place, and the demand for all the water is not yet very urgent, it is respectfully suggested that the exact method of control be not now made a subject for recommendation, but that the officers to be charged with the handling of the waters continue the study until the works are completed.

To carry out the proper regulation of the waters it would appear necessary:

First. To enlarge the western outlet to give a capacity of 40,000 cubic feet per second at a lake elevation of 1,061.

Second. To improve and put in first-class condition the Norman Dam; that is to say, stop up the leaks and make more efficient the sluices.

Third. The enlargement of the controlling sections at the Throat Rapids and The Dalles.

Fourth. The construction in the near future of a lock and dam, with provision for power plant, at Long Sault Rapids.

At International Falls is a large dam sufficient for the control of the waters of Rainy Lake to give 7 feet storage, and at the outlet of Namekan Lake (Kettle Falls) is another dam sufficient for 11 feet storage above. These works should be enough to provide 100,000,000 cubic feet of storage and permit of a minimum discharge of 5,835 cubic feet per second.

It would be advisable for both Governments to acquire and hold all patented lands up to a contour of 1,063—

It is not a question of damages, but buying the land outright.

Mr. POWELL. To prevent future disputes?

Mr. KEEFER. Yes, sir. [Continuing:]

up to a contour of 1,063 around the shores of the lake that might be affected by any of the levels suggested. Such acquisition to be by complete purchase from the owners. As to any lands not patented, but still vested in the respective Governments, both Governments should be requested to withdraw same from sale or location, and to reserve even up to a higher contour, such to be held in future as park land surrounding the lake. It might also be advisable to properly monument in the low-lying lands certain defined contours for the information of the surrounding settlers.

The answers to the above three questions have always been considered by the International Joint Commission rightly as an engineering problem, and in the above I have endeavored to deal with same almost wholly from an engineering viewpoint.

Mr. POWELL. Not going into details, but stating generally your ideas, and the ideas of those whom you represent, it is to provide all necessary facilities for storage below, at the dam, at the foot of the Lake of the Woods, and leave the matter of regulation to experience?

Mr. KEEFER. As experience teaches. It is a question of the greatest good for the greatest number.

Mr. POWELL. That is the summation of your idea?

Mr. KEEFER. Certainly, sir. I would like, in arriving at that, to go a little further on the question of range than I at first outlined. I think, in view of the low record in 1911 for navigation purposes, and the fact that the Warroad authorities have deepened their access to the river, that navigation interests are willing to concede that the level being at 1,056.5——

Mr. POWELL. That is, to provide an ideal, fixed level to be worked up to as far as possible.

Mr. KEEFER. Yes, sir. It is needless to say that conservation means the greatest amount of care in taking care of the water for purposes of power.

I will not take up your time any further. My good friend, Mr. Campbell, and myself, at Kenora, were two of the first ones to welcome the commission to Canada. I can only repeat most sincerely what was said at Kenora, again, both by Mr. Campbell and myself. I do hope that the scope of your authority will be steadily widened. He has expressed so well the appreciation of this commission by the Canadian side of the boundary that it is simply needless for me to add anything to it, and I can not express the way I feel with regard to the great benefits that are to flow from this commission. I hope, individually, that these interests will see the wisdom of joining in asking both Governments, as Mr. Tawney mentioned this morning, to consider the advisability of at once giving to you power to officially settle this matter. Perhaps they may be able to do so here to-day. I hope they will.

I want to thank you very, very much, personally, for the many courtesies I have had during the past three or four years from both the past members and the present members of this commission.

Mr. GARDNER. Mr. Wyvell, are you ready?

Mr. WYVELL. Yes, sir.

Mr. CLAPP. Before Mr. Wyvell proceeds I want to ask you a question. I do not want you to discuss it unless you wish to; but, for my own information, what is your Government advocating—greater storage than at present exists above International Falls?

Mr. KEEFER. We are not in any way opposing the greatest storage. Where we know we try to go ahead and make a recommendation. When this commission first started I did not know where I was at, to use a slang expression, regarding the Lake of the Woods. The data is not, as Mr. Meyer said, complete regarding the upper lake. We do not know sufficiently about it to make a recommendation one way or the other. We are not in any way opposing the power interests at International Falls. We believe that it is to the interest of the whole country, just as the attorney general of Minnesota has said, that the development of all of these power interests would be most beneficial. Ontario has had a number of lands submerged. You have not heard a word about our asking for any pay, or anything of that kind. Of course the question that Mr. Tawney asked "Who is going to pay?" is a problem; and until we get accurate data from the engineers I do not want to take any definite ground on that at all.

Mr. TAWNEY. As one of the representatives of the Dominion Government, submitting this whole matter to the commission for investigation, you are not asking for or making any suggestions as to what recommendations the commission should make, are you?

Mr. KEEFER. In my answers to questions 1, 2, and 3 I have endeavored to give you what I thought the commission might answer from the evidence and data obtained.

Mr. POWELL. You specifically stated it.

Mr. KEEFER. Yes; if I am answering correctly, sir.

ARGUMENT OF MR. MANTON M. WYVELL.

Mr. WYVELL. I am going to ask you not to be frightened, for while I have prepared some 30 pages of argument, I am going to read only a small portion of it; and if I may make the suggestion that I be not interrupted while reading the small portion of it that I am going to read, and then be allowed to submit all of it in the record, in order that what I have had to say may be well rounded, so to speak, keeping the record clear and definite, I shall then be glad to answer any questions that your honors have to ask me.

The Government of the United States appreciates the painstaking care and thoroughness which has been manifested by the International Joint Commission in carrying out the duties which the two Governments have imposed upon the commission in this reference to recommend levels for the Lake of the Woods.

The questions which you have before you are of great importance to the two Governments and to a great number of people on both sides of the line. It is significant also that the determination of the questions before you directly affect a great many people on both sides of the line. The eagerness displayed by the people of both countries to aid the commission in reaching a conclusion upon this matter has been very marked, while the interest in the subject is manifested by the large attendance at the hearings and by the willingness of the witnesses to give their testimony.

But while fluctuations of the levels of the Lake of the Woods have in the past affected a great many people and now affect a great many, the importance of the question to future generations is many times greater than its importance now, because what is now a partial wilderness will some day be thickly settled and many more people will find their homes, their comfort, and their pleasure in the beautiful region which it has been your pleasure to study.

The thoroughness of the work done by the engineers is testified to by all. The accuracy of the data gathered is unquestioned. The care exercised in preparing their reports so that facts may appear in the clearest possible fashion is most commendatory, and their willingness to be of assistance to inquirers is appreciated by all who have had occasion to study this question.

The questions referred to the commission are as follows:

1. In order to secure the most advantageous use of the waters of the Lake of the Woods and of the waters flowing into and from that lake on each side of the boundary for domestic and sanitary purposes, for navigation and transportation purposes, and for fishing purposes, and for power and irrigation purposes, and also in order to secure the most advantageous use of the shores and harbors of the lake and of the waters flowing into and from the lake, is it practicable and desirable to maintain the surface of the lake during the different seasons of the year at a certain stated level, and, if so, at what level?

If a certain stated level is recommended in answer to question 1, and if such level is higher than the normal or natural level of the lake, to what extent, if at all, would the lake, when maintained at such level, overflow the lowlands

upon its southern border, or elsewhere on its border, and what is the value of the lands which would be submerged?

3. In what way or manner, including the construction and operation of dams or other works at the outlets and inlets of the lake or in the waters which are directly or indirectly tributary to the lake or otherwise, is it possible and advisable to regulate the volume, use, and outflow of the waters of the lake so as to maintain the level recommended in answer to question 1, and by what means or arrangements can the proper construction and operation or regulating works, or a system or method of regulation be best secured and maintained in order to insure the adequate protection and development of all the interests involved on both side of the boundary, with the least possible damage to all rights and interests, both public and private, which may be affected by maintaining the proposed level?

Much evidence has been given upon all of the subjects mentioned in the reference, and evidence has very properly been taken of the importance of the islands in the lake as summer resorts, for this interest, important as it is in view of the great natural beauty of the islands in the lake, should not be neglected in a report upon the use of the waters of the lake.

It is a source of great satisfaction that, while all witnesses have been keenly interested in the subject matter of the reference so far as it affected their own property rights, no witness has been so overzealous as to give evidence in bad faith or to misrepresent or misinterpret facts in the slightest degree.

No better words than those chosen by the engineers can be found to describe the general phases of the problem which is before you. In their introduction, page 5, of the text, the engineers state as follows:

> The Lake of the Woods is an irregularly shaped body of water 1,485 square miles in area. The southerly portion, formerly known as the Lake of the Woods, and bordered by low shores, is an expanse of relatively shallow, open water about 25 miles across, and is now known as the Big Traverse. The northerly portion, known as the Little Traverse, consists of numerous bays and inlets, bordered by bold rocky shores, and dotted with thousands of rocky islands.
>
> The Lake of the Woods derives its water supply from a drainage area of 26,750 square miles, almost equally divided between the United States and Canada. Perhaps the most prominent characteristic of this drainage area is its abundance of rock-bound lakes. The aggregate area of all the lakes shown on the best available maps of the watershed of the Lake of the Woods constitutes 14.8 per cent of the total drainage area tributary to the lake. About 70 per cent of this water area is in Canada and 30 per cent in the United States. The shores of almost all of the lakes, except the southerly shore of the Lake of the Woods and a portion of the shore of Rainy Lake, are bold and rocky, with here and there a fine sandy beach on a bay or inlet. These lakes already possess quite a reputation as summer resorts, and are visited annually by thousands of tourists. The region abounds in fish, and also in moose, deer, and other wild life.
>
> Of the land area about 8,500 square miles, or 37 per cent of the total, consists of arable or semiarable land, most of it, however, requiring drainage. A very small proportion of the total area, consisting mainly of narrow strips along the lakes and rivers, is under cultivation.

The question of the behavior of the lake under natural conditions and under conditions of partial or complete control has been amply dealt with in the engineers' report. So thorough has this been done that there can be little doubt of the phenomena with respect to the lake since 1892, nor can there be hardly any doubt of what the behavior of the lake would have been had there been no control of any sort. The lake was clearly in a state of nature until about the year 1879. It appears that in a state of nature the fluctuations during a

period of years have been probably as great as 10 feet. There is evidence to support the belief that before 1892 the lake had been as high as 1,062.5 and probably as low as 1,052. At the hearing in Winnipeg, Mr. Meyer spoke very clearly of the winding course of the Warroad River which indicated a low state of the lake, while the old settlers, including Mr. Zippel, described the deep and well-defined channels of the streams flowing into the lake. At page 182 of the text of the report, reference is made to this phase of the problem, and at page 183 the report reads:

> Under natural conditions, however, the level which prevailed in the spring must have been sufficiently low to permit the maintenance of a good current in the river, and thus to keep the channel open, except for such silting at the mouth as would take place later in the season when the low-water flow became very small, or at times when the lake level being high would itself retard the flow.

THE LAKE UNDER CONTROL.

In 1887, the engineers tell us, a headrace was constructed partly in earth and rock excavations and partly in timber structure in a depression at the extreme western branch or thereby. In 1881 a small cut was made through the rock at one of the outlets of the lake for the purpose of developing power. In the winter of 1887 to 1888 a structure known as the Rollerway Dam, which acted essentially as a submerged weir, was constructed in the western outlet of the Lake of the Woods. In 1892 a small power plant was constructed on the eastern outlet of the Lake of the Woods, but the natural outflow from this outlet of the lake did not really come under control until 1896.

In 1893 and 1895 a dam, known as the Norman Dam, was constructed in the western outlet of the lake about a mile below the old Rollerway Dam. Stop-logs were placed therein about the year 1898. The records of the engineers concerning the controlled levels of the lake begin with the year 1892. The engineers have very carefully given us the actual controlled levels of the lake during the months of each year between 1892 and 1913. They have also computed what the natural levels would have been during those years, which computation has been very carefully arrived at and should be adopted as accurate. The difference between the actual level and the natural computed level is given year by year. On an average the lake has been maintained about three feet higher than would have obtained under natural conditions, during the past 21 years.

The engineers speak of a level of about 1,059 as the ordinary high-water level of the lake under natural conditions, using the last 21 years as a basis for conclusions. The actual ordinary high level under conditions of control would be about 1,061.4. The ordinary low level of the lake under natural conditions is believed to be about 1,054.

THE QUESTIONS BEFORE THE COMMISSION.

Considering carefully the questions referred to the commission, we find that the reference requires a report upon what the level of the lake should be for the following purposes: Domestic and sanitary purposes, navigation and transportation purposes, fishing purposes, and power and irrigation purposes.

The reference also requires that the most advantageous use of the shores and harbors of the lake be taken into consideration.

Counsel for the United States believes that he can be of the best aid to the commission in merely dwelling upon the facts which have been brought out in the testimony concerning these various uses of the waters of the Lake of the Woods.

DOMESTIC AND SANITARY PURPOSES.

There is practically no testimony regarding the question of the use of the water for domestic purposes. Shoal Lake, it is true, is to be the source of the water supply of the city of Winnipeg, but the level of the lake is immaterial, so far as this purpose is concerned, provided it does not get to a level lower than 1,052.

With regard to sanitary purposes, a reasonably low level appears to be desirable for the city of Warroad. Some testimony to this effect was introduced at Winnipeg. While the sewage is taken care of by a system of pumps, it seems that the surface water can not be so disposed of and that the higher the level of the lake the less favorable is the opportunity for drainage.

Navigation was the subject of a great deal of testimony. The principal witness on the United States side of the line was Mr. Marschalk. He testified very clearly both at the hearing at Warroad in 1912 and at the hearings last September that any level above 1,056.6 was satisfactory for navigation, and that even lower levels would be adequate if Warroad Harbor were deepened. He gave the average depths of the lake and stated in general that a level of 1,057 for this purpose would be as satisfactory as could be obtained. Maj. Peek testified at Warroad that from the standpoint of the United States engineers, the full and complete use of Warroad Harbor could be had at a level of 1,057.6. Maj. Peek further testified that a high level would mean the construction of rather extensive breakwaters or dikes on the east side of the channel at the lake approach. Mr. Marschalk also gave some testimony as to the difficulties of navigation at a level of 1,061 or above.

Capt. Wheeler testified at Warroad that navigation at the mouth of Rainy River would be greatly improved with a lower level than that now maintained as there would be more current and the channel would be kept cleaner. He further said that many reefs now partially submerged would stand out clearer with lower water and consequently that navigation would be less hazardous.

Several experienced sea captains testified at Kenora that a higher level was desirable. Capt. Hooper, who had navigated the lake for years and had kept interesting log books, said that a level of 1,060.6 was desirable. Capt. Ritchie and Capt. Hickey corroborated Capt. Hooper in this statement. The reasons for asking for this level appeared to be that a higher level would be of assistance in the towing of logs through narrow channels, the principal points of difficulty being Daveys Rock and some narrow channels through Whitefish Bay.

Most of the witnesses agree, however, that navigation is not likely to increase in volume. With the construction of the railroads, shipping has lessened and many of the boats which formerly navigated the lake now run at a loss. There is considerable navigation in the

form of towing of logs to mills. The towing of logs is likely to continue for a good many years, but even this element of navigation will probably some day cease unless some practical means for reforesting the region are adopted. It appears that last year commerce at Warroad Harbor was $450,000; that the principal items were fish, lumber, cedar poles and logs.

It is reasonably certain that the United States Government can undertake the work of dredging so that Warroad Harbor and Zippel Bay can be reached by boats drawing not more than 8 feet of water at an ordinary low level of 1,054. This statement is made merely for the information of the commission and not as a suggestion as to what the ordinary low level should be.

FISHING INTERESTS.

Considerable testimony was taken concerning the desired level of the lake from the standpoint of the fishing interests. Mr. Paul Marschalk, of Warroad, proved to be very familiar with this branch of the case, and his testimony is entitled to great weight on account of his long experience. Mr. Marschalk's testimony is to the effect that a reasonably low level was desirable because at 1,057, or thereabout, the water remained clear and the spawning ground was better protected. Page 224 of the text of the engineers discusses this branch of the case. The engineers state, in part, as follows:

> Uniformity in levels protects spawning grounds and aids in the setting of pound nets. A rather low level results in clearer and purer water, particularly in the Big Traverse, because at high stages the muskegs are broken up by the waves and the vegetable matter is scattered far out into the lake, making the water dark in color and disagreeable in taste. At the preliminary hearings at Warroad, in September, 1912, Mr. Paul Marschalk testified that during the high water of 1905 many fish died and those which were caught in the Big Traverse became unfit for food within 24 hours after being taken from the nets.

POWER INTERESTS.

Power interests have been called the paramount interests. This may be true in that a greater amount of capital is likely to be invested in the production of power than in any other field. A careful examination of the evidence, however, will disclose that a high level of the lake is by no means essential and by not means necessarily desirable so far as nearly all of the power interests are concerned. The power interest which, to increase efficiency, necessarily requires a high level of the lake is very small indeed as a careful analysis of the testimony will show.

Let us take for convenience, because they are the largest, the power interests below the outlets of the Lake of the Woods. The fall in the lower Winnipeg River below the outlets of the Lake of the Woods is 291 feet. The quantity of power capable of development is, according to testimony, from 420,000 to 425,000 horsepower. In passing, it might be remarked that this refers solely to the waters from the Lake of the Woods. Probably much greater horsepower is capable of development because of the large flow of the water from the English River, nearly all of the power sites being located below the point where the English River joins the Winnipeg.

Now all of the expert engineers who were examined upon the subject testified that the efficient use of the water for all of these

power plants did not depend at all upon the maximum height of the Lake of the Woods, but upon the volume of the water and the uniformity of its flow. Providence controls the volume of the water, but man may assist in providing a uniformity of flow.

How may this uniformity of flow be provided? The engineers have furnished the answer, namely, by providing for storage in the Lake of the Woods and by maintaining the maximum and the minimum levels substantially 5 feet apart. To my mind, one of the most important achievements of the engineers is that by the thoroughness with which they have examined this subject they have convinced everybody that a difference in levels of about 5 feet is essential for power purposes, and that this variation in levels can be maintained without seriously injuring any other interest which desires to make use of the waters. The variation in any given year will, of course, be much less than 5 feet.

It is apparent from the testimony of the witnesses who were examined in 1912 at Warroad, and it is also apparent from the testimony of Mr. Deacon who was examined in Winnipeg last February, that some believed that the lake could be maintained with a range of levels as small as 3 feet and the power interests be fully protected. It may safely be said, I believe, that any disinterested person who will now examine the engineering data will agree that provision for a draft on storage of 5 feet is desirable, considered from the viewpoint of power development.

The problem, therefore, of securing the uniformity of flow becomes easy to understand and perhaps not unduly difficult to work out in engineering detail. The proper range of levels may be maintained so that when the water is flowing into the lake rapidly, the surplus may be stored, and when the water is flowing into the lake slowly, the draft on storage may be made. When you have solved this question, namely, the amount of the draft and the proper regulation of the outlets, you have solved the problem for all the power plants on the Winnipeg River so far as the waters of the Lake of the Woods are concerned.

In reading the evidence of all of the engineers who were examined upon this subject, it will be found that their testimony completely supports this view. Engineer Phillips, of the Winnipeg Electric Railway, stated (pp. 364–365, Winnipeg Hearings) that what his plant needed most was a uniformity of flow and that it was immaterial whether the maximum level of the Lake of the Woods was high or low so long as this uniformity of flow was secured.

Mr. Harewell, of the Winnipeg Electric Railway Co., testified (pp. 384–385) that the efficient use of the plant he had under construction depended upon the amount of and the uniformity of the flow and that the height of the level of the Lake of the Woods was immaterial, so far as his plant was concerned, if this uniformity could be secured. This testimony was substantially repeated on pages 386 and 387.

Engineer Ferguson, called by Mr. Rockwood, testified (p. 397) that the minimum or maximum level would not affect the plants in the lower Winnipeg River, but that a wide range of levels would benefit them and that he had no reason to contradict Mr. Philip's statement on this subject.

Mr. Lea, an engineer of wide experience, said at page 402, in answer to questions by Mr. Laird, that a large draft was desirable for power plants on the Winnipeg River. Mr. Acres testified (p. 418) that from the standpoint of the efficient use of the water for power purposes at White Dog Rapids, it was immaterial what the maximum level was provided sufficient storage could be secured. Mr. Meyer testified (p. 454) that the efficient use of the water at the power plants on the Winnipeg River depends entirely upon the amount and uniformity of the flow.

AMOUNT OF POWER CAPABLE OF DEVELOPMENT.

Upon the question of the amount of power capable of development, Engineer Lea testified that substantially 400,000 horsepower could be developed on the Winnipeg River from the waters of the Lake of the Woods, assuming an average rate of flow of 16,000 cubic feet per second. It appears from the evidence that about 25,000 may be developed at all of the outlets of the Lake of the Woods, but that probably not more than 20,000 horsepower may be developed from the waters passing over the Norman Dam. The reason for this, apparently, is that while the average amount of water required by the mills and the municipal power plants located at other places than the site of the Norman Dam is about 2,700 cubic feet per second, the peak load requirements of said plants equals or exceeds 5,000 cubic feet per second. This leaves not more than an average of 11,000 cubic feet per second available for the Norman Dam at peak load time.

It is not clear that the muncipal power plants and the mills desire a very high maximum level. The evidence of Mr. Acres is that a level as high as 1,063 would be extremely disadvantageous. However, for the sake of argument, assume that an average of 16,000 cubic feet per second producing from 20,000 to 25,000 horsepower would be benefited by a high level of the lake. There is another potential power possibility which would be distinctly injured by a high level of the lake, namely, the Long Sault Rapids in the Rainy River. Mr. Meyer testified at pages 325–326, in answer to questions by Mr. Berkman, that each additional foot of the Lake of the Woods reduced the head at that point (namely, the Long Sault) by nearly the same amount. I quote Mr. Meyer's answer to Mr. Berkman's questions:

Mr. MEYER. It would practically reduce the head at that point very nearly the same amount. That is, a foot increase in the lake level backs the water up at the foot of the Long Sault Rapids and reduces the head at that point pretty nearly the same amount, dependent somewhat upon the lake stage that you consider.

Mr. Meyer also gave this significant testimony:

Mr. BERKMAN. What is the difference in ratio between the amount of water that runs out of the Lake of the Woods and passes over the Long Sault?

Mr. MEYER. The low-water flow over the Long Sault is greater than the low-water flow out of the Lake of the Woods on account of the evaporation loss as indicated by the records of the past 21 years. The average flow, of course, is considerably greater at the outlets of the lake.

Mr. BERKMAN. How much greater is the average flow?

Mr. MEYER. Possibly in the ratio of 3 to 4—3 at the Long Sault and 4 at the outlets—dependent again upon how much of the flow you are utilizing at the outlet, etc.

Mr. KEEFER. What would be the difference in the value of a foot head at the Long Sault and a foot at the outlet?

Mr. MEYER. If you are considering a development at the Long Sault utilizing the fall of about 10 or 11 feet, it would be more valuable there than at the outlets. That is, the lower the head the more valuable every foot is because it is pretty hard to operate a plant satisfactorily, in any event, under those low heads.

Mr. Ferguson testified that he had known power plants to be a successful business proposition when the fall was from 11 to 12 feet.

The Long Sault Rapids must be considered in a discussion of the power possibilities embracing the Lake of the Woods project. Now, there is no perceptible fall from the foot of Long Sault Rapids to the Lake of the Woods; therefore, when you increase the maximum level of the Lake of the Woods by a foot and a half, you benefit the power development at the Norman Dam to some extent, but you also at the same time decrease, by practically just as much, the power development at the Long Sault.

The difference between the gain of power at the Norman Dam and the loss of power at the Long Sault by adding a foot and a half to the maximum height of the Lake of the Woods is hardly perceptible and amounts to but a few hundred horsepower at the most; and should the maximum level of the Lake of the Woods be raised much above 1,060.5 you might lose the benefit of any economic development at all at the Long Sault Rapids, because the fall there would be insufficient.

Therefore, with a fixed range of levels, there will practically be no difference in the entire available power from the Long Sault Rapids to Lake Winnipeg whatever the maximum level may be as storage alone is the controlling factor.

By subjecting the testimony to careful analysis it will be seen that the benefit which would accrue from an extremely high level, considering the power projects as a whole, is almost imperceptible.

When one compares 1,000 horsepower, or probably less, with the destruction of the beautiful sandy beaches, the injury to the wharves and boat houses and the damage done generally to the substantial citizens who own cottages on the Lake of the Woods, the power interests do not seem paramount after all. Added to this is the fact that the addition of a foot and a half to the level of the Lake of the Woods submerges at least 15,000 acres of land, some of which, at any rate, is valuable for farming conditions. Therefore, the power interests do not seem supreme after all.

SUMMER RESORT INTERESTS.

The summer resort interests should by all means be carefully considered, and, in my judgment, they should be considered under the terms of the reference because the reference requires a report upon the most advantageous use that can be made of the "shores and harbors of the lake." The "shores" would, of course, include the shores of the islands and the harbors, the places for the docking of boats, public or private, so that too much emphasis can not be laid upon so manipulating the lake that the scenic beauty will be preserved in its fullest capacity and the beaches and shores of the islands

be so preserved as to get the highest possible human enjoyment therefrom.

One of the most impressive hours given over to the taking of testimony was, in my judgment, the afternoon in Winnipeg when the evidence of the summer resort owners was being received. Men of the most substantial character in the city of Winnipeg, charitably inclined men, men whom it is a delight to know and to do honor to, were before you and freely gave their testimony in a wholesome, frank, manly spirit. I mention the names of a few of these citizens. Mr. Deacon, an engineer, was one, who in addition to owning a cottage was familiar with conditions on the lake. Mr. Condon, Mr. Gardner, Mr. Barrett, Mr. Moss, and Mr. Drewry were others. Mr. Hadcock, manager of the Y. M. C. A., testified very fully of the injury that would be done should the lake be maintained at a very high level. Mr. Hart, who managed a Methodist camping ground, gave testimony of importance. None of these men desired a level higher than 1,060.5. Many of the property owners had built their places with pride and satisfaction and they love these summer homes as intensely as did the farmers on the American shore love their farms. These men were united in saying that the sandy beaches would be destroyed, the beauty of the islands injured, and the harbors rendered difficult of approach if the level of the lake exceeded 1,060.5. The testimony of Mr. Drewry was particularly attractive. He said, page 252:

> I for one would be very sorry indeed to take any stand that would be inimical to the interests of the city, but I do think, Mr. Chairman, that the Almighty never put all those beautiful little sand beaches there and those charming coves in those islands except from a human point of view. There is the commercial side and also the human side, and I think that should be our object in bringing this matter before you.

DIPLOMATIC CORRESPONDENCE.

It is true that the Secretary of State originally asked for a minimum level higher than now seems necessary or desirable. On the 6th day of May, 1905, Francis B. Loomis, Acting Secretary of State, addressed a note to the Hon. Hugh O'Beirne, chargé d'affaires at the British Embassy, in which the following sentence appears:

> In view of this it is suggested by the Secretary of War, in his letter on this subject of the 26th ultimo, that an agreement might be reached with the Canadian authorities by which the dam could be so operated as to prevent the level of the lake from falling below the datum of 7.2 feet on the Warroad gauge.

Being reduced to terms of sea-level datum, this means an elevation of 1,060.8. This note was duly acknowledged by the Hon. Hugh O'Beirne, but the suggestion was not accepted, and on the 21st day of April, 1906, William H. Taft, then Secretary of War, addressed a letter to Mr. Elihu Root, Secretary of State, in which he stated as follows:

> The department duly received your letter of February 24 last, inclosing copies of correspondence with Hon. H. Steenerson, Representative in Congress from Minnesota, on the subject of the level of the water in the Lake of the Woods, in connection with damages which he states have been sustained by certain settlers for whose relief he proposed making provision by legislation.
>
> Replying thereto, I beg to inform you that the War Department does not consider the present time favorable for pressing the request for action by the Dominion authorities toward maintaining the level of the Lake of the Woods

at 7.2 on the Warroad gauge, as asked in previous correspondence on the subject, and prefers now that the matter be not urged further on its initiative until brought up again by further developments.

This seems to close the documentary correspondence so far as the United States is concerned.

It is freely admitted that for a number of years the officials of the United States looked upon the stage of 1,060.8 as the usual level of the Lake of the Woods during the navigation season. This was based upon a very imperfect knowledge of conditions prevailing on the Lake.

During a time of low water and deficient rainfall, a request was made to Canada to maintain the lake at this elevation in the interest of navigation. At that time, having acted with the knowledge it possessed and having adopted 1,060.8 as the ordinary level, the War Department was estopped by then existing laws from changing its erroneous position. Later, in 1912, Congress, realizing that in some such cases mistakes had been made in the adoption of planes of reference, authorized the substitution of actual low-water planes, and under this authority, further dredging has been done at Warroad, and to-day the maintenance of a lake level of 1,060.8 is no longer necessary in the interest of navigation.

It seems scarcely reasonable to insist now, when further and more accurate data are available, that the United States must adhere to the position it took in ignorance, and here it should be noted that knowledge of the region of the lake possessed on the Canadian side of the line in those days was no better than that in the United States. This was rather plainly indicated in what is now understood to have been the action taken by the Dominion Government upon the request of the United States above mentioned, though it must be remembered that no official notice of this action was ever communicated to the United States which remained ignorant of the way in which its request had been received and treated.

All the conclusions and statements made by the War Department with reference to the Lake of the Woods were reached by the examination of records since the time of the building of the Norman Dam and the deduction of the lake level was reached by an examination of records during such period and not of records of conditions existing prior to the construction of the Norman Dam. (See bottom of p. 12, Lake of the Woods text, Meyer and White.)

While the United States asked for a level higher than now seems necessary or desirable, Canada, too, a decade ago seemed to prefer a reasonably low level, as the records show. It seems that, under date of May 10, 1905, the Hon. Hugh O'Beirne communicated the request of the Secretary of State to Earl Grey and the subject was duly considered by the Canadian authorities. Mr. U. Valiquet made a report upon the matter, which report was duly communicated to the deputy minister of the Department of Justice at Ottawa. A portion of Mr. Valiquet's report reads as follows:

At the time of my visit to Rat Portage, July 13 last, the gauge readings kept in connection with the dam was 101.1, and the stop logs in the dam were then being removed, as it was considered that should the water in the lake rise higher it would cause inconvenience to the Rat Portage Lumber Co.; in fact, the water stood about 1 inch on the lower floor of the company's mill, and a further rise of 3 or 4 inches would cause the mill to stop operations and flood the land.

The local manager of the Lake of the Woods Milling Co., at Keewatin, Mr. Kelly, also informed me that the level of the lake was then as high as convenient for his company's interests; but if the lake level could be controlled within a certain range, say, between 98 on the gauge and 101, their best interests would be served. * * *

Under these circumstances, compliance with the request of the Acting United States Secretary of State is not recommended.

One hundred and one and one-tenth referred to in the report equals 1,060.10, and 98 equals 1,058.10 sea-level datum. It therefore appears from the data then at hand that an elevation of 1,060.10 was too high for the most efficient use of the waters, so far as the mills at the outlets were concerned.

A further report was made by Mr. R. P. Fairbairn, engineer of public works, which reads, in part, as follows:

It will appear from these readings that the level at Rat Portage would require to be held at 100.90 to maintain the elevation of the water at 7.2 on the gauge at Warroad Harbor, the minimum height requested by the United States authorities.

Several large industries would be seriously affected if it were attempted to hold the water of the Lake of the Woods to this elevation throughout the season of navigation. * * * To maintain a minimum elevation of 100.90 it would be necessary to raise the machinery and lands of the Rat Portage Lumber Co., at a cost of many thousand dollars.

The industries using the water powers at the outlet of the Lake of the Woods would also be seriously injured by maintaining the elevation of the Lake of the Woods at 100.90 during the early period of navigation each year or until the flood waters have passed. The injury sustained by the power users is caused by backwater in the Winnipeg River, reducing the head on their water wheels. * * *

While the present conditions exist, the loss to the industries at Kenora and Keewatin by maintaining a minimum elevation of 7.2 feet at Warroad Harbor would be so great that the request of the United States authorities could not be recommended.

The question of the meaning of the words "normal or natural" level of the lake, as used in article 2, has been brought to your attention. My own view is that they should be given the natural and normal meaning. There can be no doubt of the meaning of the word "natural." "Natural" signifies a condition in a state of nature. "Normal" is usually synonymous with "natural"; for instance, the normal temperature of a person is his natural temperature, and though he may have been ill with tuberculosis or some other disease which necessarily raised his temperature for a long period of time, yet no doctor would call a temperature of 100 a normal temperature.

In exceptional cases "normal" may have exceptional meanings. It is true that some of the United States engineers refer to the lake as it existed for a few years as a normal condition. Other agents and engineers did not. In a report by A. F. Naff, chief agent of the Department of the Interior, engineer's office, page 233, we find the following sentence:

I found that the information from others and the observations I made, that the present stage of the water is an abnormal one and the source of much dissatisfaction and complaint on the part of the citizens living in the vicinity of the lands claimed to be damaged by the high water.

In an affidavit made by George A. Ralph and sworn to November 14, 1895 (see p. 235 of the text of the engineer's report), we have the following:

I am by profession a civil engineer. * * * I have for the last eight years been engaged as United States Government surveyor in surveying lands

in the northern part of Minnesota, some of which lie along the shores of the Lake of the Woods. * * * I have taken particular notice of the condition of the land bordering on said lake as to its being overflowed by waters from the lake. I observed that this was not a natural condition, but was caused by the damming up of the waters of the lake.

Then, too, this reference came about because of complaint about high water and there could hardly be any point in asking for the value of the lands which would be submerged using the actual high-water mark which had prevailed for the last 22 years, since the Canadian Government does not now desire as high a maximum as the ordinary high-water mark.

Mr. KEEFER. Pardon me, but I think that Mr. Fairbairn's statement is best set out by the commission engineers at page 12. Mr. Fairbairns, who was the chief engineer of the department at that time, states:

In 1906 there was brought to the attention of this department a recommendation made by the United States Chief of Engineers, War Department, that the level of the Lake of the Woods be not permitted to fall below a stage of 7.2 on the Warroad gauge. This 7.2 was taken to be approximately an equivalent of 100.90 on the gauge, which the public works department had established in the vicinity of Kenora. In making this request the Chief of Engineers pointed out that there were several water-power companies at or near the dam, which would be benefited by the maintenance of the lake at the highest possible datum.

After giving this matter consideration, it was decided that the 7.2 asked for as a minimum stage was too high because it would not make provision for the handling of the flood waters without causing stages at certain seasons of the year to be much higher than this 7.2. I was chief engineer of the department of public works at that time, and reported that a minimum stage of 7.2 would not be in the interest of all parties concerned, and that the interests of navigation, both in Canada and in the United States, could no doubt be served by keeping the level of the lake in the near vicinity of from 100 to 101 on the gauge at Kenora. Consequently, in the interests of navigation, as conducted by both the United States and Canada, as nearly as possible what may be called a general stage, instead of a minimum stage of 7.2 has been maintained.

We simply ask you to consider that.

Mr. WYVELL. Whatever I have stated or whatever I have said is merely an analysis of the testimony, and I am not suggesting any level of the lake, and have merely given prominence to certain facts in the evidence. The difference is not between us; it is between the interests.

Mr. ANDERSON. I assume, gentlemen, that it is the purpose of the commission to get through this afternoon?

Mr. GARDNER. That is the intent.

Mr. ANDERSON. That being so, I will go on and be just as brief as I possibly can.

ARGUMENT OF MR. EDWARD ANDERSON, K. C.

Perhaps it is not quite fair to myself to undertake, at a long session like this, to address the commission at this late hour in the afternoon; but, in view of the desire of the commission and in view of the fact that I think the commission has sufficient information before it with which to reach a conclusion, I will not press my own personal views, but I will make a very few remarks in drawing this hearing to a close.

Before I discuss the questions before the commission let me for a moment extend to the officials of the United States Government, and particularly to Mr. Wyvell, my very hearty thanks on behalf of myself and my Canadian confrères for the many courtesies extended to us. We have appreciated them greatly, particularly as we were far away from home; and I think perhaps the climax of all the compliments was provided this morning when we awoke and found that Washington was covered with a mantle of snow to remind us of our distant northern home. Whether that is to be attributed to the Department of State or not I do not know. At any rate, we appreciate the compliment.

A matter for very considerable congratulation, Mr. Chairman, in a hearing and investigation of this kind, is the very high plane along which the arguments have been conducted by the counsel representing the various interests. In international questions like these, it is highly desirable, and it struck me that there was a commendable want of anybody taking an extreme position, and it seems to me that such things make the work of the commission very much lighter.

So many complimentary things have been said about the commission that I shall refrain, I think, from saying anything more on that point. There is just one thing that did strike me, and I think I ought to give expression to it now—that is, the evident desire upon the part of the private interets, and particularly upon the part of the interests claiming compensation here, to have their claims decided and disposed of by this commission rather than by reference to courts of law. I think that was such a high compliment to this commission that I can not refrain from commenting upon it as I pass along.

Now, gentlemen, coming to the matter before us. As I said, I am going to be very brief, and I am only going to touch one or two points.

I agree with Mr. Wyvell that in a matter of this kind the duty of the counsel should largely be confined to assisting the commission, in so far as they can, by drawing attention to the evidence that has been given and by advancing any arguments that can be made in order to elucidate or clear up the questions before the commission: and, as far as I am concerned, I shall follow Mr. Wyvell's lead in that respect.

It seems to me, Mr. Chairman, that perhaps the first question that would arise in the minds of the commission, or in the mind of anyone who is taking any part in it is: Why were those questions referred to the commission? What was the origin of them? The treaty was entered into for the purpose of the disposition of disputes and questions between the high contracting parties. Was this reference in pursuance of any complaint lodged by anybody or by one Government with another Government? Apparently not. Apparently there was never any complaint lodged by the Government of the United States with the Government of Canada. I think it has been erroneously assumed that the cause of this investigation was complaints which have been made by the riparian owners upon the south shore of the Lake of the Woods. Erroneously, I say, because I do not know anything upon the record to suggest that that

was the reason for the reference. I am sure that no complaint ever was lodged with the Canadian Government by the United States Government. Therefore, the reason for the reference can not be because of any complaint made by the citizens of Warroad or of the south shore of the lake, because, presumably, if any complaint had been made—any substantial complaint by its citizens to the Government of their own country—that complaint would have been transmitted by their Government to our Government.

Therefore that is the deduction that I draw from that. It was not by reason of any complaint, but we must seek for some other reason giving rise to the reference.

I think the wording of the reference supplies an answer to that, that it was the desire on the part of both Governments to have the waters of the Lake of the Woods and the tributary waters adequately and properly conserved in the best interests of the public of both countries in the order in which they are detailed in that reference.

In that connection, I wish to draw attention to the fact that the reference was brought about by reason of a request from the United States Government. The request proceeded from the United States Government to the Canadian Government and was acceded to, as they were bound to accede to it, by reason of the treaty, and the questions were framed according to the diplomatic correspondence appearing as an appendix to the testimony. The questions were submitted by the United States Government.

I think, bearing that in mind, that it will throw very great light upon the question which has occupied, perhaps, more time, so far as the construction of the reference is concerned, than any question before the commission, and that is the question as to the meaning to be given to the use of the words "normal or natural" in question 2.

In the construction of documents it is a well-known rule that you may and properly should look to the surrounding circumstances to ascertain the meaning of the parties to them. Keeping that in mind, and keeping in mind the fact that these questions were submitted by the United States Government; keeping in mind the fact that the question of navigation had been under the control of the engineers of the War Office, I think you will see why the words "normal or natural" were used here. My suggestion is this: The correspondence and the reports of the United States engineers have been referred to at such length that I do not propose to go over them again, but from the continued and persistent use there of the word "normal" you will see that the engineers had in their minds a particular state of affairs, and it is not necessary now to refer to what that state of affairs was. It was in existence since the construction of the dam at Norman.

I am not asking you to travel very far when I ask you to assume that the officials who had been making use of this term "normal," the officials who started the United States Government on the road to invoke the provisions of this treaty, no doubt had a hand in the framing of these questions.

Taking those facts together, it seems to me that the deduction is irresistible that what the framers of the question had in mind when they used the term "normal" was the meaning attached to it by the United States War Office engineers in their correspondence and in their reports.

Properly, Mr. Commissioner Mignault has suggested this: He says the difficulty that presented itself to his mind was the use of the term "natural" there. My suggestion about that is, first, that the word "natural" following "normal" is used synonymously with "normal."

I think the commission knows that lawyers are given to using, sometimes, a great many words. Personally, I avoid that as much as I can. I know, and perhaps the laymen know better than the lawyers, even, that many times we are supposed to use words, redundant words, meaning the same thing. I think perhaps that might afford some solution of the difficulty, just the same as in a deed of grant the document says "to have and to hold." I imagine if you use either one, or particularly the word "have," you would accomplish all that is desired by the grant. But lawyers, with that desire to make things explicit, go on and say "to hold," and so on. I submit that when this question was drawn up that the framer of it simply used it in that way—normal and natural meaning the same thing. If that is so, then it seems to me that the commission need have no difficulty in coming to the conclusion that the contention suggested by counsel for the Dominion Government is the correct one. And there is something more to assist the commission in coming to that conclusion. There are provisions of the treaty itself which seem to me to make that conclusion irresistible. It seems to me that the treaty implies—more than implies; it makes it clear—that the high contracting parties had no intention of submitting past differences with reference to these matters to the commission; that what had been done, the uses that had been made of the boundary waters and the waters flowing in and out of them, were to be considered as properly done, or, at any rate, not subjects for future references.

Looking first at article 2 of the treaty, the last section in the first paragraph reads as follows:

> That this provision shall not apply to cases already existing or to cases expressly covered by special agreement between the parties hereto.

Then article 3:

> It is agreed that in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto—

Dealing entirely with the future. Then article 8 also seems to me to bear that contention out when it says:

> The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary.

Reading the treaty and keeping in mind the facts that I have mentioned with reference to the way in which the correspondence and reports were made by the United States War Office engineers, it seems to me that the commission should not have much difficulty in coming to a conclusion as to what was meant by those terms in the reference, and that the reference assumed conditions existing to be normal, or, at any rate, assumed existing conditions, and it was really with reference to the future that the reference spoke.

To pass along to another point which arises out of this but which is perhaps only incidental, it may be that the commission will consider that, as a matter of propriety, as a matter of information to their respective Governments, they should make some report upon

the natural or original natural condition of the lake levels. I submit that they should not; but if they do, then I want to urge this view upon the commission: If anybody is called upon or is recommended by the commission to pay any compensation by reason of land submerged prior to the date of the treaty, owing to the construction of the outlets at the Lake of the Woods, I am going to say that the responsibility should be assumed jointly by the United States Government and by the Canadian Government.

My reason for saying that is this: Take article 3 of the treaty, the opening words of the paragraph that I have already read:

It is agreed that in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the parties hereto, etc.

So far as the Canadian Government is concerned, they were more than permitted; they were active participants in the construction of them. But I submit that the United States Government permitted those obstructions; and to reason that out I will first suggest that no complaint or objection was ever made by the United States Government to the continuance of that dam. Not only that, but they adopted it as part of their scheme for the improvement of navigation of Warroad Harbor. That is perfectly clear, if you refer to the correspondence and the reports of the United States engineers. Mr. Keefer has already read them. I can not and will not take the time to read them, but just let me detail shortly what the United States Government did officially to show that they permitted that obstruction.

Early in 1900, I think it was—about the time that the Canadian Northern Railway was constructed into Warroad, the engineers of the United States Government were instructed to examine and report as to the feasibility of navigation on the Lake of the Woods, particularly with reference to harbor improvements at Warroad. Their officials went there and examined the ground, examined the locality—the mouth of the river—and not only that, but they went over to the outlet at Lake of the Woods and examined this dam. Reports were made by them to their head officers, to their chief officers, as to the existence of the dam, and as to the effect it had upon navigation, etc.; and upon the strength of those reports the United States Government passed legislation and made appropriations for improvements at Warroad. That is the strongest kind of evidence of permission. I do not think I need to elaborate upon that question. I will only say that as late as the sittings at Warroad in 1915 Maj. Peek, who appeared, gave evidence and admitted that the improvements at Warroad Harbor were based upon the assumption of the continuance of the dam at the outlet. His evidence on that point is to be found at page 41 of the September hearings. I had better read it, because it will make it much plainer.

Mr. ANDERSON. Any work that has been done under your supervision here has been done upon the assumption of the maintenance of the works at Kenora—that is, the dam there—has it not?

Maj. PEEK. Yes.

I submit, therefore, that as far as the maintenance of the dam at Warroad is concerned, at the outlet, that both Governments are responsible for it, if any responsibility attaches. If the view taken by counsel for the Dominion Government is the correct one, which

I submit it is, that question need not arise, because you are only asked to find damages in the event of their going above what was meant by the use of the term "normal or natural" in the reference.

In that connection I would suggest that you should refer to the report of Maj. Derby. I have forgotten the date. I haven't it at the moment. It is in the correspondence. He was asked to report upon the complaint that my friend Mr. Wyvell has referred to, that was made by the riparian owners with reference to the high stage of waters along in 1905 or 1906. It is true that it appears that they did make a complaint, but a complaint to their own Government, and their own Government assumed to deal with the matter.

Mr. KEEFER. You will find that report at pages 471–473 of the Winnipeg hearings.

Mr. ANDERSON. That is sufficient for the record. Maj. Derby was sent to investigate the matter of this complaint. He did investigate it. He dwelt very learnedly upon the law affecting the question. He went into the question that has been discussed so much before this commission of high-water mark, and he came to the conclusion that the riparian owners had no cause of complaint and so reported to his superior officers at Washington. Apparently that was taken as conclusive, so far as the officials at Washington were concerned, and no more was heard of their complaint until the hearings at Warroad, of this commission, in 1912.

That question was then brought somewhat prominently forward. Mr. Commissioner Tawney has suggested, and the suggestion bears out a view that I intended to advance before the commission, that the framers of the question evidently contemplated that a higher stage of levels than natural levels should be recommended by the commission; or, as my learned friend Mr. Campbell suggests, existing level; at any rate, that higher stage of levels was contemplated, and that, of course, is a matter that should be borne prominently in mind by the commission in arriving at its conclusion.

Mr. TAWNEY. I suggested that, if it is credited to me as incorrectly appearing from the reference itself.

Mr. ANDERSON. Yes, just exactly; and I intended, as I say, before drawing your attention to that, to make some argument, but it is not necessary any more than merely to mention it.

Therefore, Mr. Chairman, if the commission is of opinion that any compensation should be made to the riparian owners for anything that happened by reason of the construction and operation of the dam at the outlet, it should be borne jointly by the two Governments.

On the question of compensation, the gentlemen appearing here representing private interests have said that these riparian owners should be adequately and generously compensated. I am not going to take issue with that position, but I am merely going to point out at the outset, at any rate, that any compensation that may have to be paid will have to be paid by the Governments, and therefore it is important that no excessive compensation should be given, that only reasonable compensation should be given, and only such compensation as the commission is of opinion these claimants may be entitled to, bearing in mind all the circumstances.

One of the circumstances that I want to mention very particularly just at the moment is the circumstance that practically all of the

settlers upon the south shore of the Lake of the Woods came there after the erection of the dam at Kenora and took up their land with a full knowledge of the existing conditions.

Mr. MIGNAULT. So far as we are concerned, under the reference, Mr. Anderson, we are merely asked to give valuation to the land which would be submerged, without expressing any opinion whether the persons who have taken up that land after its submergence would have any claim by reason of the fact that they did so with a full knowledge of the existing conditions?

Mr. ANDERSON. The only way, Mr. Commissioner, that that question would arise at all would be for you to consider that it was your duty to investigate as to any damage that may have been caused by reason of the construction of the dam.

Mr. MIGNAULT. We have nothing to do with the damage; we are merely asked to value certain lands.

Mr. ANDERSON. Just so. That being so, if that should be the view of the commission, that simplifies the matter very much. Of course that may be determined somewhat upon whether you start at the existing levels, as we claim you should, or whether you should go below that. If you went below that, then this question might possibly arise.

Mr. MIGNAULT. We might perhaps fairly express an opinion on that point, calling the attention of the Governments to the fact that practically all the settlers have settled there since the Norman Dam was constructed?

Mr. KEEFER. Yes; or since the Rollerway Dam.

Mr. MIGNAULT. Or the Rollerway Dam. That might be a fair statement to make.

Mr. ANDERSON. On that question of "natural," just to come back to it for a moment, because the discussion brings it to my mind again, it would be very difficult, indeed, for this commission to find what were the original natural levels of the Lake of the Woods. It has been suggested that you go back possibly as far as the glacial period, but I would not suggest that you go back that far. I would suggest this, that ever since 1879, when the Canadian Pacific Railway constructed its line along the north shore of the Lake of the Woods, there have been obstructions at the outlet there, and that would add another complicating feature to the question, if you undertake or endeavor to go back prior to the date of the reference in order to ascertain what the original natural levels were.

Mr. TAWNEY. What do you have to say in regard to the report of the engineers as to the computed natural levels being the correct way of ascertaining it?

Mr. ANDERSON. That, Mr. Commissioner, of course is an engineering problem, and I do not propose to discuss engineering problems with which I am not conversant, and I would not like to hazard an opinion upon that point. It is entirely a couclusion based upon hypothetical information, it seems to me.

Mr. TAWNEY. Not entirely.

Mr. ANDERSON. Well, perhaps not entirely, but at any rate——

Mr. MIGNAULT. Largely so?

Mr. ANDERSON. Yes; largely so.

Mr. TAWNEY. Would it not be sufficient for the purposes of the commission, in order to determine, as I look at it—I do not attach

as much importance to that question of natural or normal as most of you gentlemen do—would not the computation made by the consulting engineers be sufficient to enable the commission for the purposes of this reference and for the purposes of its recommendations or for the purposes of answering the question as to whether the recommended level is in excess of the normal or natural level to give the two Governments the best information that can be obtained on the subject?

Mr. ANDERSON. Well, of course I will admit this, that there will be no objection at all to the commission's reporting to the Governments that the engineers of the commission had made a computation, and that was their view of it.

Mr. TAWNEY. Nobody has questioned the computations of the engineers——

Mr. ANDERSON. Nor am I questioning them. I am only pointing out the difficulty that would be experienced in going into the question of natural levels simply as an argument, perhaps, to support my contention largely that the question does not arise at all, or, at any rate, that the commission has not been asked to go into it. It simply imports another difficulty into the duties of the commission.

There are a number of other question, but I think I will pass on to a point that is of very considerable importance to the commission. That is, the question of high-water mark; but I am not going to dwell at any length upon that; I am going to make just a few remarks.

The question is an important one. It seems to me that this commission would be justified in holding that a considerably higher point than 1,059 would have been high-water mark under original natural conditions. Of course, if the commission gives effect to the argument I have already been advancing it will not be necessary to deal with that, but on the other hand, if they should not, and they have to go into the question from the other aspect, it will be necessary, perhaps, first to inquire what was the original high-water mark. It is very difficult indeed to come to a conclusion upon that point. The engineers of the commission have suggested an opinion that 1,059 should be taken as high-water mark under natural conditions, but I think that it would not be unreasonable for us to contend for a good deal higher point than that under computed natural conditions.

A great many quotations have been made and a great many definitions have been given as to what would be high-water mark. A Minnesota decision has been very frequently referred to, Judge Mitchell's. I will refer to another Minnesota decision, a later one, in which a definition was also laid down. I refer to the case of Erdman *v.* Watab Rapids Power Co. (112 Minn., 175), where this definition of high-water mark is laid down:

> By "high-water mark" is meant those points along the shore where the water rises to such a height as may reasonably be anticipated but does not include such extraordinary freshets as can not be anticipated.

It does not follow out so minutely as Judge Mitchell's decision does the various qualifications, but it is a fairly comprehensive definition of what high-water mark is.

Mr. POWELL. Judge Mitchell has an element that that has not in it. It means the length of time sufficient to kill the vegetation.

Mr. ANDERSON. I am going to hazard an opinion myself on that, and ask you to consider as to whether it is not reasonable. I do not suggest that high-water mark is the highest mark to which the water ever reaches. There has been that suggestion made, but I do not make that suggestion. My suggestion is this, that high-water mark shall be taken to be that point to which the water rises sufficiently long to change the character of the vegetation or to destroy it for agricultural purposes in any year or for two or three years or three or four years out of a cycle of twenty or thirty years. What I mean to say is this, that you should take high-water mark in ordinary years, not in the extraordinary years. For instance, if the water goes up to 1,061 this year, and goes up to 1,061 the year after next, and so on for alternate years, and stays there sufficiently long at that point to interfere with the land for agricultural purposes, that that is an event which you may anticipate will ordinarily recur, and that that should be the point which you should hold as high-water mark.

Taking that as a proposition, another definition was offered, and I have no doubt that you have grasped the idea of it. I would suggest that under natural conditions a much higher point than 1,059 should be taken as high-water mark. I would refer you to some of the computations of the engineers—I have not the place at that time, but it is very readily obtainable—in which they have given these figures:

From May to September, in 1896, the lake rose to a stage of 1,060 and remained there for 90 days. I think that everyone will agree that if water remained there for 90 days it would destroy the land for the purposes of agriculture for that year.

In 1897 the water went up to 1,060 and remained there for 108 days.

In 1899 the water went up to 1,060 and remained there for 90 days.

In 1905 the water would have gone up to practically 1,060 and remained for 20 days.

I submit there is a condition which you may anticipate to recur more or less frequently, and that, therefore, that should properly be considered as high-water mark. If you take the conditions that have existed for the last 21 years, of course a much higher point than that will be taken as high-water mark—1,061 or above.

On the question of high-water mark I just want to give the commission a few references to the evidence along the line that I am contending for—a higher water mark than 1,059.

Mr. POWELL. If you call our attention to it on the minutes, that will be sufficient.

Mr. ANDERSON. I am not going to read it. Testimony was given on that point in 1912 at page 133, dealing with the question of high-water mark, and at page 154, at the same sittings, evidence was given upon that point. At the Kenora sittings in 1915 Capt. Hooper gave very detailed evidence upon the question of high-water mark.

Bearing that evidence in mind, bearing in mind the evidence of the computation in the figures given by the engineers, I submit that it would not be unreasonable to suggest that a much higher point than 1,059 should be taken as high-water mark in the original state of nature. In fact, the Kennedy high-water mark might be taken.

That would perhaps be making an extreme argument, but it seems to me there might be considerable to be said in favor of it, because the water was evidently at that stage for sufficiently long to destroy the vegetation—the lichens. It must have remained there for a considerable time. The evidence upon that point is that the water came up to within 6 inches of that and made another high-water mark on more than one occasion, and if it came up to that point once it may come up again.

That, perhaps, is an extreme case, but at any rate it can to a certain extent fit in with some of the decisions upon the question of what is a high-water mark.

Mr. POWELL. Before you pass from that—I have not mentioned it, but what has been dwelling on my mind is whether or not all this talk of high-water mark has any direct bearing upon the reference. The reference does not refer to high-water mark at all. Is not the fair construction of the reference the mean?

Mr. ANDERSON. I think not. At the same time, of course, you are quite right in saying that the reference does not refer to high-water mark.

Mr. POWELL. If there is a possibility or a probability of water reaching a certain point as high-water mark, there is no certainty when it is going to occur, and it lessens the value of the land up to that particular stage. Apart from that I do not think the question of high-water mark really——

Mr. ANDERSON. Except in this way, that has been apparently stated by everyone who appeared here—certainly by Mr. Samuelson and the deputy attorney general of Minnesota—that it was only above the high-water mark that the riparian owners were entitled to compensation.

Mr. POWELL. Yes; in that connection.

Mr. ANDERSON. Of course it has another important bearing in the aspect that you mention.

I think, Mr. Chairman, that I shall not detain you at any greater length, except to refer very briefly to some of the more important interests represented by the Government.

Just a moment in passing as to Rainy Lake. I would suggest this to the commission: There is not enough information before the commission now upon which they can properly deal with the Rainy Lake situation. It seems to me that is so. But, on the other hand, if the commission does determine it has come to the conclusion that it has sufficient information in that regard, then I want to make one or two suggestions. If the commission is of opinion that the stage of water should not be raised above 497, then I think that the question of compensation should not be entertained by the commission at all. It seems to me that too many difficult questions arise for the commission to determine. The way that it strikes me is this: The dam that there is there, and the works that keep the water up to the level of 497 were there when this reference was made. I submit that the commission should assume that the legal authority was given for the construction of those works. Any consequences that might follow from that would be consequences that the persons constructing the works should undertake or should assume. I do not see very well how the commission can determine, for instance, the propriety and the rights of the litigants in the actions that are before the court.

I quite appreciate the situation in which Mr. Rockwood's clients find themselves. I am prepared to say that so far as my view of it is concerned at the moment if there is a question as between Mr. Rockwood's clients and the Government it should be taken up by some private negotiations and disposed of. I do not think it is a matter that is before the commission. I think if it is to be brought properly before the commission for their disposition it should be brought in either one of two ways: It should be brought there as Mr. Samuelson suggested to-day—I am not assenting to its being so done, because counsel for the Dominion Government would have to get instructions from their Government before they could agree to it—but that is one way in which it could be done. Another way is that application could be made to this commission for permission to raise the dam.

Mr. POWELL. Under No. 8? We could deal with it under No. 8.

Mr. ANDERSON. You could deal with it entirely.

Mr. TAWNEY. What article?

Mr. ANDERSON. Perhaps it is 3; is it not?

Mr. POWELL. It is the same thing.

Mr. ANDERSON. Anyway, the application for permission to construct——

Mr. POWELL. Raising the water on one side after the other.

Mr. TAWNEY. That would be article 3.

Mr. POWELL. It is the same thing. Article 8 is simply an expansion of the other.

Mr. ANDERSON. I leave it at that. A great deal has been said on the question of public use. I am not going to go into that further than merely to refer to the interest of the Dominion Government in the water powers upon the Winnipeg River in the Province of Manitoba. Those water powers are held by the Government of Canada in trust for the public, not only the works that have already been constructed, but the undeveloped works. The title remains in the Dominion Government. It is the policy of the Government not to grant outright the power to use water and develop the sites. All that they do, so far as private interests or corporations are concerned, is to give them concessions or leases, renewable for certain periods. So that the Dominion Government holds in trust for the public all the water powers, both developed and undeveloped. So far as the developed ones are concerned, the time will come when they will come back again to the Government; and while they are being operated by the companies they are being operated under governmental control and regulation, so far as rates and other questions of that kind are concerned.

Mr. POWELL. You are speaking about what water powers?

Mr. ANDERSON. Water powers in the Province of Manitoba, on the Winnipeg River.

Mr. POWELL. Not Ontario?

Mr. ANDERSON. No, sir; I am not speaking at all as to Ontario.

As showing the importance which the Dominion Government attaches to the undeveloped powers of Winnipeg River, reference may be made to the Water Resources Paper No. 3, copies of which are in the hands of the consulting engineers of the commission.

This report presents in detail the power and storage studies carried on by the Dominion Government water branch, and the conclu-

sions and recommendations which have been reached and made looking to the conservation of the power resources of the watershed to their maximum possible extent.

In this report the extent of the governmental investigation is briefly summarized on pages 5 and 7, the conclusions on page 9, and the recommendations on page 10. Brief reference to these pages and to the summarizing tabulation of developed and undeveloped power and of power costs on pages 258, 259, and 264 will indicate to the commission the importance which the Dominion Government attaches to the power resources of this river.

A further report on the domestic, industrial, commercial, and public interests depending on the Winnipeg River power already developed has been prepared by the Dominion water-power branch, and copies have been handed to the consulting engineers of the commission. A reference to pages 82 and 83 of this report will indicate to the commission the vast importance of the available Winnipeg River power to the district adjacent thereto.

Mr. Keefer has already dealt with the matter of navigation, fishing, and other interests under the control of the Dominion Government. I want, just before I conclude, to refer to a recent case which deals very succinctly and decisively with some of the questions that we have been discussing, one of them being the right of eminent domain. It is a case decided very recently by the United States Supreme Court—United States *v.* Chandler-Dunbar Co. (229 U. S., 53).

Mr. TAWNEY. Have you a citation in the Federal Reporter—the number of the volume in the Federal Reporter?

Mr. ANDERSON. Two hundred and twenty-nine is the Supreme Court reference.

Mr. MIGNAULT. It is in the United States Reports?

Mr. TAWNEY. It is in the Federal Reporter, too.

Mr. ANDERSON. This case has already been referred to as to one point, but not as to another, particularly as to the right of eminent domain. It also discusses the question of high-water mark, it being the most recent announcement, I believe, that I know of, and it deals with the question that has arisen, I think, out of a decision of this commission on the St. Marys River. I deem it of great importance.

Mr. TAWNEY. Horsepower cases?

Mr. ANDERSON. Yes, sir.

Mr. TAWNEY. On the question of the acquisition of the land on the American side, by the United States Government?

Mr. ANDERSON. I have prepared an extract of the more salient points of the decision, which I wish to appear in the record. It is as follows:

United States *v.* Chandler-Dunbar Co. (229 U. S., 53) (p. 63): This title of the owner of fast land upon the shore of a navigable river to the bed of the river is at best a qualified one. It is a title which inheres in the ownership of the shore, and unless reserved or excluded by implication passes with it as a shadow follows a substance. It is subordinate to the public right of navigation, and however helpful in protecting the owner against the acts of third parties is of no avail against the exercise of the great and absolute power of Congress over the improvement of navigable rivers. That power of use and control comes from the power to regulate commerce, between the States and with foreign nations. It includes navigation and subjects every navigable river to the control of Congress. * * * If in the judgment of Congress the use of the bot-

tom of the river is proper for the purposes of placing therein structures for the aid of navigation, it is not merely taking private property for a public use, but the owner's title was in its very nature subject to that use in the interest of public navigation. * * * Commerce includes navigation. The power to regulate commerce comprehends the control for the purpose and to the extent necessary of all navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the Nation and subject to all the requisite legislation of Congress.

(P. 65): The conclusion to be drawn is that the question whether the proper regulation of navigation of this river at the place in question required that no construction of any kind should be placed or continued in the river by riparian owners and whether the whole flow of the stream should be conserved for the use and safety of navigation are questions legislative in character, and when Congress determines, as it did by the act of March 3, 1909, that the whole river between the American bank and the international line, as well as all of the upland, north of the present ship canal throughout its entire length was necessary for the purposes of navigation of the said waters and the waters connected herewith that determination was conclusive.

So the Supreme Court of Wisconsin has held that a company authorized by the legislature to construct dams in a navigable stream in aid of navigation is not liable to the owner of a mill operated by the water power of the river, for injury caused by the intermittent increase and decrease in the flow of the water as a result of the use of the dam, although the mill owner was operating his mill under statutory authority prior in time. The above case is a strong one on the paramountcy of navigation interests in Wisconsin, and the constitution of that State having declared that the navigable waters should be common highways and forever free. (Falls Manufacturing Co. *v.* Aconto R. Imf. Co., 87 Wis., 134; 58 N. W., 257.)

Other cases illustrating the same point are: Brooks *v.* Cedar Brook Imp. Co. (82 Me., 17; 19 Atlan., 87, 17 A. St. Rep., 459; 7 L. R. A., 460); New York Canal Ap. *v.* People (17 Wend. N. Y., 571); Zimmerman *v.* Union Canal Co. (1 Watts & S. (Pa.), 346); Lehigh River Bridge *v.* Lehigh Coal Co. (4 Rowle (Pa.), 926 Am. Dec., 111).

It seems to me that I should not take up any more time of the commission. There is just one thing. The question has been asked by the commission during the course of the arguments of various counsel as to how they should recommend that the conclusions of the commission be carried out; that is, what legislation? I do not pose as an authority upon American law, but I have considered the question somewhat, and I have looked into the question of the treaty making powers of the United States under its Constitution which would suggest for whatever it is worth that if the commission is going to deal with the question of making any recommendation as to how its conclusions shall be carried out, it should be done by treaty and not by legislation, because, as I read the law, the treaty-making power is the highest form of lawmaking power under the Constitution.

A good deal has been said as to the difficulties that would arise with reference to exercising the right of eminent domain. All I have to say as to that is that I do not feel very much concern. I believe this, that if this commission make recommendations the propriety of which appeals to their respective Governments, a way will be found to work it out.

Mr. POWELL. The necessary authority, State or Federal?

Mr. ANDERSON. Yes. I have sufficient faith in the genius of the people of this country to find a way to carry out any recommenda-

tions that may be made by the commission, notwithstanding the fixity of their Constitution.

Mr. Chairman, I have finished. I regret that we were hurried so much to come to a conclusion. I should have liken to have taken up a little more time, but I believe it is quite unnecessary. I have covered the ground sufficiently and I believe that the questions that are before the commission have been sufficiently discussed so that the commission will form a just and proper conclusion.

In concluding I just wish to join Mr. Campbell in the felicitous remarks which he made with reference to the wisdom and high statesmanship indicated by the high contracting parties in passing this treaty. It is an object lesson, it seems to me, which might well be copied throughout the world. It is particularly a striking object lesson in the light of what is going on in the world. The benefits to be derived from entering into a treaty like this are so great that it is unnecessary for me to detail them or dwell upon them.

I thank you, gentlemen.

Mr. CAMPBELL. This is not an argument, gentlemen, but I would like to get on the record reference to some pages of the evidence on two or three points, first, as to the acreage of the Federal Government of the United States. I would refer the commission to page 19 of the Warroad record.

As to the value of lands in addition to the pages already cited by Mr. Laird and myself, Mr. Holdahl's evidence at page 248 of the Warroad record. I would refer also to exhibits 7, 8, 9, and 10, referred to on pages 353 and 355 of the Winnipeg record of evidence, taken in February.

As to navigation, it is not my part to argue about that at all. There is one reference, however, I wish to put in. Mr. Stewart's evidence in the Winnipeg record, pages 478 and 479.

As to Rainy Lake, speaking now merely from what we have listened to, I would say that I think my clients would like the advantage of an additional 3 feet, raising the datum there from 497 to 500, doing justice to all interests if that can be done economically. But I can not, nor can the engineers we have had with us studying the other questions, decide that, not having made an examination; but if it is feasible and can be carried out, we would like it. Not with the idea—I think Mr. Rockwood used the words "Splitting our interests, or our alliances"—but because, if it be found that an additional 3 feet there would benefit us specially in the Winnipeg River, it may be that we should contribute something to getting the advantage of the additional storage. In view of the fact that our ratio of contribution might be on a different percentage, if you feel that the reference includes Rainy Lake and an estimate of acreage and value around the lake, you would require the amounts for the two respective lakes separately, so they could be dealt with if an appropriation is justified.

That is all I have to add.

Mr. ANDERSON. There is just one thing that I overlooked on the question of compensation. It is not an argument; I simply want to say this, that the water-powers branch of the Government has, through its officers, prepared an analysis of the evidence submitted at Warroad upon the question of land values. If the commission

desire it I can leave with the secretaries of the commission a sufficient number of copies to be distributed to the members of the commission which I hope will be of help in analyzing and determining the question.

Mr. CAMPBELL. My colleague reminds me that we had a little conference before we were unexpectedly called on, on Tuesday. I said in answer to what Mr. Rockwood had said as to the fair value of the lands, that I did not think 15 or 20 per cent added would be out of the way. It appears that afterwards I may have made it 25 at another time. I had no authority for saying that, even from my colleague, and while adhering to the 15 or 20, I do not want the exaggerated percentage charged against me.

Mr. SAMUELSON. On the question of placing before the different governments the matter of additional authority in this commission to finally close this matter up, if it is not out of place I should like to hear Mr. Campbell's suggestion along that line and see if there is any possible way in which we can get together so as to get this matter closed out.

Mr. CAMPBELL. I welcome that. It was discussed a little yesterday, when we were going out to Annapolis, but we did not get time at the adjournment to go any further, because the Canadian counsel were busy.

Mr. TAWNEY. Mr. Anderson made a suggestion that they could not give the matter consideration because he had no authority from the Government. I do not know that Mr. Anderson fully understood Mr. Samuelson. It was not proposed that the counsel for the Government should join with the interests in asking that that be done.

Mr. CAMPBELL. The interests should ask the counsel for the Government——

Mr. TAWNEY. Ask their respective Governments to do it.

Mr. ANDERSON. I understood it, but I merely wanted to make it plain that counsel could not arrive at any conclusion in the matter.

Mr. TAWNEY. No; of course not.

Mr. GARDNER. That is a matter that can be arranged entirely out of the commission.

In closing this somewhat lengthy session on behalf of the commission I want to express our appreciation for your presence here and the manner in which you have interested yourselves in the presentation of the interests represented in the settlement of this somewhat complicated and many-sided question.

I am absolutely sure that I will not be contradicted when I say that you have conducted yourselves in such a commendable way that our proceedings have not been interrupted from the floor in any instance, and I am sure that the commission will join with me in saying that the great help which you have provided in your able presentation of these questions is fully appreciated and will be invaluable to us in coming to a final conclusion.

Thanking you on behalf of the commission for your attendance and close attention and the able manner in which you have presented the matter, and the good nature that you have manifested toward each other, this session is now adjourned.

(The commission thereupon adjourned.)

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